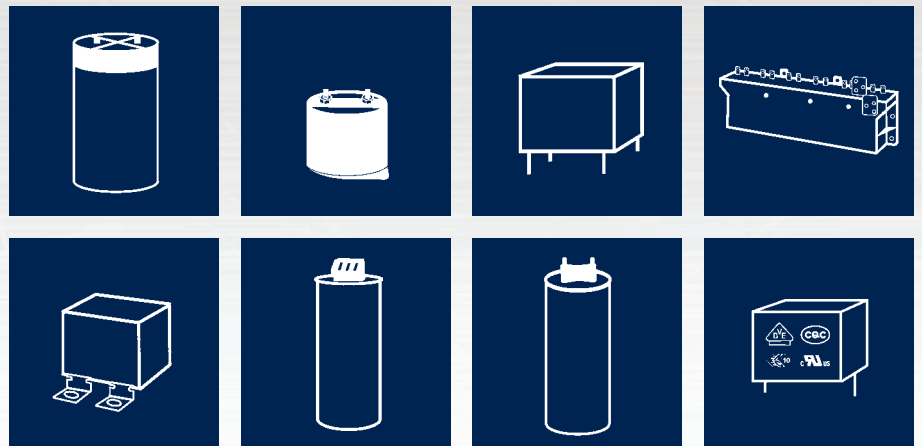




FILM CAPACITORS

2020/2021



DC-LINK ■ SNUBBER ■ MODULES ■ AC ■ X/Y



ENGINEERED SOLUTIONS

JIANGHAI EUROPE
Electronic Components GmbH

Capacitors from Jianghai

JIANGHAI EUROPE ELECTRONIC COMPONENTS GMBH IS THE EUROPEAN SALES ORGANIZATION OF NANTONG JIANGHAI CAPACITOR CO., LTD., NANTONG (CHINA). SINCE 2004, SALES, MARKETING, TECHNICAL SUPPORT, CUSTOMER SERVICE TEAM AND WAREHOUSE OF JIANGHAI EUROPE ELECTRONIC COMPONENTS GMBH ARE LOCATED IN KREFELD AND KEMPEN (GERMANY).

» ELECTROLYTIC CAPACITORS

Jianghai has grown since its foundation in 1958 to become the largest Chinese manufacturer of aluminum capacitors generating revenues of more than 500 million USD in 2019. While Jianghai started in the beginning with the production of specialty chemicals (e.g., electrolyte solutions), it entered the production of aluminum electrolytic capacitors already in 1970.



» INTEGRATION OF PREMATERIAL

More recently, Jianghai extended its production range by integrating high and low voltage anode foil etching and forming facilities. All factories are located in mainland China: the most important ones are in Nantong (north to Shanghai), in Inner Mongolia, and in Xi'An area. Jianghai is well prepared for further expansion due to its successful entrance to the stock market in summer 2010.

» FILM CAPACITORS

Jianghai's product range comprises aluminum electrolytic capacitors in screw terminal, snap-in and radial leaded styles. In 2012, the product portfolio was complemented by a range of power film capacitors. For this new business unit, Jianghai also follows the strategy of vertical integration and thus the production will extend from the preparation of the plastic film to the assembly of the finished goods. The product portfolio of DC-Link and Snubber capacitors has been enlarged in the year 2016 by AC-film and X/Y capacitors. Highly automated production facilities ensure the efficient mass production of film capacitor modules. Driven by the thriving electric vehicle market in China, Jianghai has attained a leading position for the supply of these customer specific components.



» POLYMER CAPACITORS

The year 2013 was marked by a major breakthrough in R&D for polymer aluminum electrolytic capacitors: the voltage proof for these ultra-low ESR products was pushed out to as much as 200V, enabling the utilization of these advanced capacitors in more applications, e.g. in white goods, industrial automation, telecom infrastructure, power supplies, and LED ballasts.

» CAPACITOR COMPETENCE CENTER

Global presence of experienced sales and technical marketing experts at offices in Europe, Asia and the Americas ensure the local support of our customers based on sound know-how in all project phases. In 2014 Jianghai Europe has established an additional service for its customers in Europe: Experts for capacitors are awaiting telephone calls or emails at the CCCenter as a kind of hotline for all kind of technical requests.



» CUSTOMIZED PRODUCTS

Jianghai's particular strength as a volume manufacturer is to offer customized products. Jianghai focuses on the demanding professional industrial segment with many power electronics applications. Research and development in collaboration with several specialized university institutes as well as the access to all vital pre-materials enable Jianghai to create engineered, customized solutions to fit smoothly into a specific application.

Jianghai is continuously improving processes, thereby enhancing the quality of its products and services. The list of certificates awarded to Jianghai reflects its level of achievement. In the year 2013, the Jianghai Europe sales office has become certified according to ISO9001 and ISO14001.

» CONTACT

Jianghai Europe Electronic Components GmbH
 Phone +49 (21 51) 65 20 88 – 0
 Fax +49 (21 51) 65 20 88 – 88
 E-Mail info@jianghai-europe.com

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■ DC-LINK CAPACITORS

SERIES DC-LINK	Code	Temperature		PAGE
CBB 131	DL	85°C	CYLINDRIC SCREW TERMINAL	5
CBB 131S	DY NEW!	85°C	CYLINDRIC SCREW TERMINAL	14
CBB 132	DH	105°C	CYLINDRIC SOLDERING PIN	19
CBB 136	DP	85°C	PLASTIC CASE MOUNTING	22
CBB 136G	DG	105°C	PLASTIC CASE MOUNTING	25
CBB 138	DS	105°C	SQUARE SOLDERING PIN	28
CBB 138H	DR NEW!	105°C	SQUARE SOLDERING PIN	34

■ SNUBBER CAPACITORS

SERIES SNUBBER	Code	Temperature		PAGE
CBB 161	IL	105°C	FLANGE CONTACT	40
CBB 162	IP	105°C	SOLDERING PIN	45
CBB 165	IS	105°C	FLANGE CONTACT	50
CBB 166	IG NEW!	105°C	SOLDERING PIN	55

■ MODULES

MODULES	Code	Temperature		PAGE
CBB 133	DM	85°C	METAL HOUSING	58
CBB 135	DV	105°C	PLASTIC HOUSING	62

■ AC FILTER CAPACITORS

	SERIES AC	Code	Temperature		PAGE
PRELIMINARY DOCUMENT >>	CBB 65	AG NEW!	70°C	OIL FILLED · SINGLE PHASE	68
PRELIMINARY DOCUMENT >>	CBB 235/235Y	AT/AY NEW!	70°C	PU-FILLED · 3-PHASE Δ/Y	70
PRELIMINARY DOCUMENT >>	CBB 237	AQ NEW!	70°C	PU FILLED · SINGLE PHASE	74
PRELIMINARY DOCUMENT >>	CBB 238	AN NEW!	105°C	AC CAPACITOR · LEADED	78
PRELIMINARY DOCUMENT >>	CBB 238H	AR NEW!	105°C	AC CAPACITOR · LEADED · THB	81

■ X/Y CAPACITORS

ON REQUEST

DC-LINK

NEW

CBB 138H DR
Square · Leaded
105°C | THB
Page: 34

1 2 3 5

CBB 138 DS
Square · Leaded
105°C
Page: 28

1 2 5

CBB 132 DH
Cylindric · Leaded
105°C
Page: 19

1 2 4 5

CBB 136G DG
Cylindric Plastic-
case · 105°C
Page: 25

1 2 3 4 5

← HUMIDITY DESIGN ← SQUARE LEADED ← 105°C SQUARE LEADED ← 105°C CYLINDRIC LEADED

NEW

CBB 131S DY
Cylindric · Al-case
85°C
Page: 14

1 2 3 4 5

CBB 131 DL
Cylindric · Al-case
85°C
Page: 5

1 2 3 4 5

CBB 136 DP
Cylindric Plastic-
case · 85°C
Page: 22

1 2 4 5

← SMALLER MORE CAPACITANCE → PLASTIC CASE

APPLICATIONS:

- 1 High power frequency converters
- 2 Motion control, welding equipment, elevators
- 3 Electric and hybrid electric vehicles
- 4 Photovoltaic and wind inverters
- 5 Industry high-end power supplies

SNUBBER

CBB 162 IP
Leaded
105°C
Page: 45

1

CBB 166 IG
Leaded · Enlarged
105°C
Page: 55

1

→ ENLARGED

CBB 161 IL
Lug
105°C
Page: 40

1 2

CBB 165 IS
Lug · Miniaturized
105°C
Page: 50

1 2

→ SMALLER

↑ SOLDERING PINS ↑ SOLDERING PINS

APPLICATIONS:

- 1 High pulse an high frequency circuits
- 2 IGBT mounting

MODULES

CBB 135 DV
Plastic Case
105°C
Page: 62

1 2

CBB 133 DM
Metal Housing
85°C
Page: 58

1 3

APPLICATIONS:

- 1 High power frequency converters
- 2 Electric and hybrid electric vehicles
- 3 Electric & hybrid electric vehicles, traction & trains

AC FILTER

NEW

CBB 237 AQ
Single Phase
Al-case · PU
70°C
Page: 74

NEW

CBB 235 AT
Δ · 3-Phase Al-case
PU
70°C
Page: 70

NEW

CBB 235 AY
Y · 3-Phase Al-case
PU
70°C
Page: 70

→ 3-PHASE Δ → 3-PHASE Y

NEW

CBB 65 AG
Single Phase
Al-case · Oil
70°C
Page: 68

CBB 238 AN
Square
Leaded
105°C
Page: 78

CBB 238H AR
Square
Leaded
105°C · THB
Page: 81

↓ OIL FILLED → THB

APPLICATIONS:

AC Filtering

X/Y

ON REQUEST

WARRANTY The information contained in this datasheet does neither form part of any quotation nor of a contract, it is believed to be accurate, reliable and up to date. Quality data are based on the statistical evaluations of a large quantity of parts and do not constitute a guarantee in a legal sense. However, agreement on these specifications does mean that the customer may claim for replacement of individual defective capacitors within the terms of delivery. We cannot assume any liability beyond the replacement of defective components. This applies in particular to any further consequences of component failure. Furthermore it must be taken into consideration that the figures stated for lifetime and failure rates refer to the average production status and are therefore to be understood as mean values (statistical expectations) for a large number of delivery lots of identical capacitors. These figures are based on application experience and data obtained from preceding tests under normal conditions, or – for purpose of accelerated aging – more severe conditions. JIANGHAI reserves the right to change these specifications without prior notice. Any application information given is advisory and does not form part of any specification. The products are not primarily designed for use in life supporting applications, devices or systems where malfunction of these products can reasonably be expected to result in personal injury. JIANGHAI customers using or selling these products for use in such applications without prior written consent of JIANGHAI do so at their own risk and agree fully to indemnify JIANGHAI for any damage resulting from such improper use or sale. This version of the datasheet supersedes all previous versions.

NOMINAL CAPACITANCE C_R Nominal Capacitance is defined at 20°C and 50Hz (120Hz).

RATED VOLTAGE U_R, U_N Rated Voltage is the maximum operating peak voltage of either polarity but of a non-reversing type waveform (DC capacitors only), for which the capacitor has been designed, for continuous operation. The Rated Voltage is marked on the capacitor. See also Voltage Derating tables.

RATED AC VOLTAGE U_{RMS} Maximum RMS value for the sinusoidal alternating voltage.

OPERATING VOLTAGE The plastic film capacitor varies in the maximum applicable voltage depending on the applied voltage waveform, current waveform, frequency, ambient temperature (capacitor surface temperature), capacitance value, etc. Be sure to use capacitors within the specified values by checking the voltage waveform, current waveform, and frequency applied to them (In the application of high frequency, the permissible voltage varies with the type of the capacitor. Refer to the specification for details).

NON-RECURRENT SURGE VOLTAGE U_S Peak voltage induced by a switching or any other disturbance of the system which is allowed for a limited number of times and for durations shorter than the basic period.

- Maximum duration: 50 ms / pulse

- Maximum number of occurrences: 1000 (during load)

MAXIMUM RATE OF VOLTAGE RISE dV/dt Maximum permissible repetitive rate of voltage rise of the operational voltage.

MAXIMUM CURRENT I_{MAX} Maximum Rms Current for continuous operation, see Current Derating tables.

MAXIMUM PEAK CURRENT \hat{I} Maximum permissible repetitive peak current which can occur during continuous operation. $\hat{I} = C_R \cdot (dV/dt)$

MAXIMUM SURGE CURRENT \hat{I}_S

- Maximum duration: 50 ms / pulse

- Maximum number of occurrences: 1000 (during load)

SERIES RESISTANCE R_S Effective ohmic resistance of the conducting elements of the capacitor.

EQUIVALENT SERIES RESISTANCE ESR The ESR represents all ohmic resistances: $ESR = \tan\delta/(\omega C) = R_S + \tan\delta/(\omega C)$

DIELECTRIC DISSIPATION FACTOR $\tan\delta_0$ Constant dissipation factor of the dielectric material.

LOSS FACTOR $\tan\delta$ The dissipation factor is the ratio between the reactive and effective power.

HOTSPOT TEMPERATURE $\Theta_{HOTSPOT}$ Temperature at the hottest position inside the capacitor. $\Theta_{hotspot} = \Theta_{ambient} + P_{loss} \cdot R_{th}$
 R_{th} : thermal resistance, P_{loss} : Power loss $P_{loss} = ESR \cdot I_{rms}^2$, $\Theta_{ambient}$ = ambient temperature

CHARGING AND DISCHARGING Because the charging and discharging current of capacitor is obtained by the product of voltage rise rate (dV/dt) and capacitance, low voltage charging and discharging may also cause deterioration of capacitor such as shorting and open due to sudden charging and discharging current. When charging and discharging, pass through a resistance of 20Ω/V to 1000Ω/V or more to limit the current. When connecting multiple film capacitors in parallel in withstand voltage test or life test, connect a resistance of 20Ω/V to 1000Ω/V or more in series to each capacitor. In addition, **capacitors must be discharged via a resistor before handling**. Because the capacitors do not have any discharge resistors built-in, there is a risk of residual voltages and electric energy contents that might be dangerous.

OPERATING CURRENT The pulse (or AC) current flowing through the capacitor is expressed as: $\hat{I} = C \cdot dV/dt$. Due to the fact that the dissipation factor of the capacitor is greater than zero, heat will be generated in any application where alternating currents or pulses occur. The resulting internal temperature rise may cause a severe deterioration of the capacitor's withstanding voltage, or may lead to a breakdown (even smoke or fire may result). Therefore, the safe use of capacitor must be within the rated voltage (or category voltage) and the permissible current ranges. The rated current must be considered by dividing into pulse current (peak current) and continuous current (rms current) depending on the break down mode, and when using, should make sure the both currents are within the permissible range.

TEMPERATURE RANGE AND ALTITUDE Use film capacitors only within the specified operating temperature range. The altitude and barometric pressure have an impact on the functionality of the capacitor. Max. Altitude: 2000m above sea level

EXPECTED LIFETIME The expected lifetime of the capacitor depends on the applied voltage and the hot spot temperature during operation. For capacitors applied in different situations, the obtainable average service lives are different. Please refer to the life time diagrams of each series.

FAILURE RATE λ (FAILURE IN TIME FIT) 1 FIT = 1/10⁹h (1 failure per 10⁹ components test hours), $\lambda = r/(nt)$

r = number of failure, n = test number, t = test time

INSULATION VOLTAGE U_i Rms value of AC voltage designed for the insulation between terminals of the capacitor to case or earth. The insulation voltage is equal to the rated voltage of the capacitor, divided by λ , unless otherwise specified.

INSULATION RESISTANCE R_i Ration between applied DC Voltage and resulting leakage current after 1 minute of charge. It is defined in MΩ. Typically it is given as time constant $R_i \cdot C$ [μF] in seconds.

VOLTAGE BETWEEN TERMINALS U_{TT} Voltage between terminals.

VOLTAGE BETWEEN TERMINALS AND CASE U_{TC} Voltage between terminals and case.

BZZING NOISE Any buzzing noise produced by a capacitor is caused by the vibration of the film due to the Coulomb force that is generated between the electrodes with opposite poles. It is of no harm to the capacitor.

SURFACE OVER TEMPERATURE $\Delta\theta_{case}$ When current continuously flow through the capacitor, the temperature inside the capacitor will rise induced by dissipated heat. If the temperature exceeds the maximum allowed hot-spot temperature, it might cause a short circuit or fire. The limits described in the catalogue must not be exceeded and it's necessary to check the temperature on the capacitor's surface in operation.

FLAME RETARDATION Although flame retarding PU resin or plastic case material is used in the coating or encapsulation of plastic film capacitors, continuous exposure to high temperature ambient or fire will break the coating layer or plastic case of the capacitor, and may lead to melting and ignition of the capacitor element.

HUMID AMBIENT If used for a long time in a humid ambient, the capacitor might absorb humidity and oxidize the electrodes causing damage to the capacitor. In case of AC application, high humidity would increase the corona effect. This phenomenon causes a drop in capacitance and an increase of capacitor losses. Humidity needs to be avoided. If needed please inform Jianghai separately for technical adopted components.

STORAGE CONDITIONS 1) Capacitors must not be stored in corrosive atmospheres, particularly not when chlorides, sulfides, alkali, acids, lye, salts, organic solvents or similar substances are present. 2) It must not be stored in high temperature and/or high humidity environments. The following storage conditions must be kept (applicable only for storage in the original package): Temperature: ≤ 35 °C; Humidity: ≤ 80% RH, no dew allowed on the capacitor; Storage time: ≤ 24 months

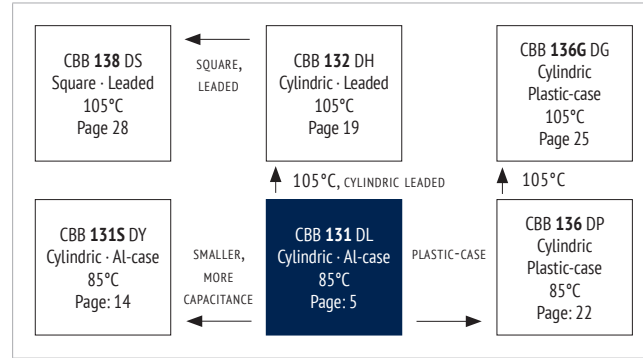
MOUNTING Other devices, which are mounted near the capacitor, should not touch the capacitor. Additional heat coming from other components near the capacitor may reduce the lifetime of the capacitor. Do never attempt to bend or twist the capacitor after mounting and avoid any mechanical stress on the terminals. Never exceed the max. permissible torques when tightening the terminal screws or the mounting bolt's cap nuts.

CAUTION & WARNINGS Do not touch the terminals of capacitors. The energy stored in capacitors may be lethal. Ensure that the operating environment of the equipment into which the capacitor has been built, is within the specified conditions. Capacitors must not be used in corrosive atmospheres, particularly not when chlorides, sulfides, alkali, acid, lye, salts, organic solvents or similar substances are present. Electrical or mechanical misapplication may be hazardous. Personal injury or property damage may result from bursting of the capacitors or from expulsion of melted material.

FEATURES

- DC-Link
- Very low dissipation factor
- High ripple current capability
- Self-healing
- Long lifetime
- Aluminum case

OVERVIEW



PRODUCT



APPLICATIONS

- High power frequency converters
- Motion control, welding equipment, elevators
- Electric and hybrid electric vehicles
- Photovoltaic and wind inverters

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	55/85/56 (IEC 61071)
Operating Temperature	-55 ~ +85 °C ($\theta_{hotspot} \leq 85$ °C)
Storage Temperature	-55 ~ +85 °C
Rated Voltage U_{RDC}	600 ~ 3.600V _{DC}
Capacitance Range	44 ~ 7.200 μ F
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 \cdot U_{RDC}$ (20 °C, 10 s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000V_{AC}$ (20°C, 50Hz, 10s)
Max. Overvoltage	$1,1 \cdot U_{RDC}$ (30 % of time under load) $1,15 \cdot U_{RDC}$ (30 min. per day) $1,2 \cdot U_{RDC}$ (5 min. per day) $1,3 \cdot U_{RDC}$ (1 min. per day) $1,5 \cdot U_{RDC}$ (max. 30 ms, 100ms per day)
Insulation Resistance R_i °C	≥ 10.000 M $\Omega \cdot \mu$ F (20 °C, 100 V _{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_o$	$\leq 2 \cdot 10^{-4}$ (20 °C, 100 Hz)
Life Time Expectancy	≥ 100.000 h, failure rate ≤ 50 FIT ($\theta_{hotspot} \leq 70^\circ\text{C}, U_{RDC}$)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

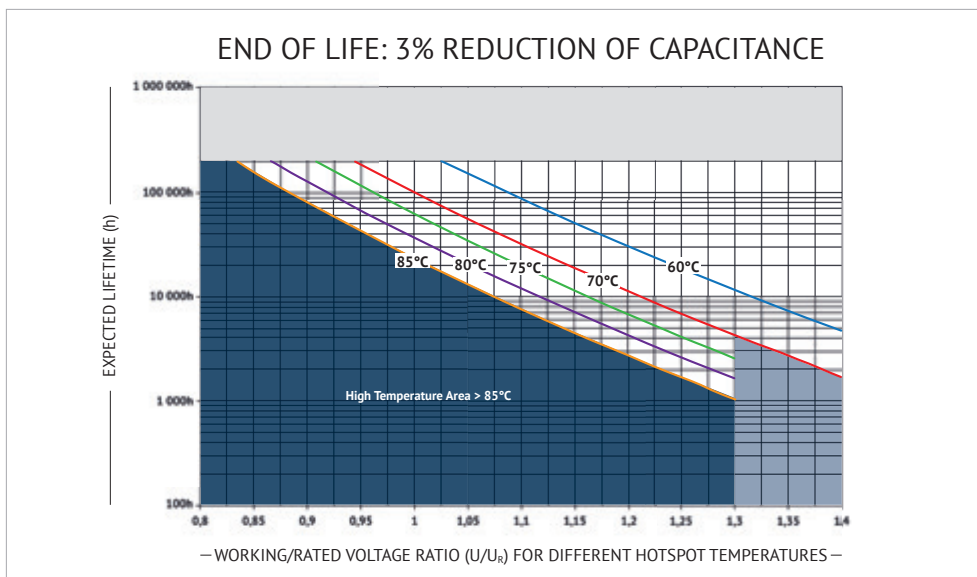
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

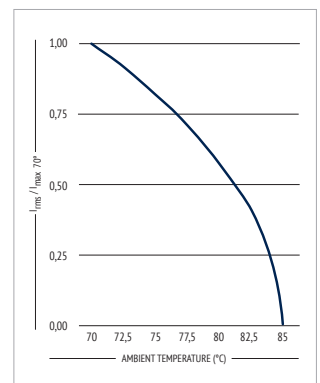
APPROVALS

- UL94-V0:**
Plastic & Compound Mass
- UL810:**
CZDS2.E227010 (Construction)
(except Can Style C & P)

LIFETIME



CURRENT DERATING



DC-LINK

■ CAN STYLES

CAN STYLE A

$H_1 = H + 5\text{mm}$

Aluminum Case with Flanging

$D_T = 12\text{mm}^*$

M6*10 screw female*

***preferred**

CAN STYLE B UPDATED

$H_1 = H + 5\text{mm}$

Aluminum Case with Flanging

$D_T = 12\text{mm}^*$

M6*10 screw female*

***preferred**

CAN STYLE C

$H_1 = H + 5\text{mm}$

Aluminum/Plastic Case

$D_T = 16\text{mm}^*$

M6*10 screw female*

M8*10 screw female

***preferred**

CAN STYLE D

$H_1 = H + 5\text{mm}$

Aluminum/Plastic Case
Enlarged Anti-Creep Insulation

$D_T = 12\text{mm}^*$

M6*10 screw female*

***preferred**

CAN STYLE E/F/G

$H_1 = H + 5\text{mm}$

Aluminum/Plastic Case
Anti-Creep Insulation

Can Style E $D_T = 12\text{mm}$

Can Style F $D_T = 14\text{mm}$

Can Style G $D_T = 16\text{mm}$

Can Style E M6*10 screw female

Can Style F M6*10 screw female

Can Style F M8*10 screw female

Can Style G M8*10 screw female

***preferred** M10*10 screw female

CAN STYLE J/K

$H_1 = H + 5\text{mm}$

Aluminum/Plastic Case
Anti-Creep Insulation

$D_T = 12\text{mm}^*$

M6*10 screw female*

***preferred**

DC-LINK

in mm

CAN STYLE L/M

Aluminum/Plastic Case
Anti-Creep Insulation

Can Style L: $D_T = 14 \text{ mm}$
Can Style M: $D_T = 12 \text{ mm}$

M6*10 screw female*
M8*10 screw female

*preferred

CAN STYLE P

Aluminum/Plastic Case
Double Pole
Anti-Creep Insulation

$D_T = 16 \text{ mm}^*$

M6*10 screw female*

*preferred

CAN STYLE „X“

OTHER CAN STYLES
ON REQUEST

on request

on request

on request

in mm

DIMENSIONS

Diameter D ± 1,0 mm	Diameter Cab D1 ± 1,0 mm	Can Style	Pitch P ± 0,5mm	Length Cab Lc ± 1,0 mm	Diameter Terminal D_T ± 0,5mm
76	-	C	32	20	16
76	-	J	32	10	12
85	-	A	32	-	12
86	-	C	32	20	16
86	89	D	32	35	12
86	-	E	32	25	12
86	-	F	32	25	14
86	-	B,J	32	10	12
86	-	K	32	32	12
89	92	D	45	35	12
96	-	C	45	20	16
116	-	A	50	-	12
116	-	C	50	40	16
116	-	P	50	40	16
116	-	L	50	10	14
116	-	M	50	10	12
136	-	G	50	35	16

Max. Torque for terminals: 3 Nm (M5), 5 Nm (M6), 6 Nm (M8), 8 Nm (M10)
Max. Torque for stud mounting screws: 12 Nm (M12), 15Nm (M16)

INTERNAL CONSTRUCTION

(Example: Can Style C, double inner construction)

NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn
4	Terminals	Cu, Sn-plated
5	Deck	PC
6	Aluminum Case	Al
7	Potting Compound	PU resin (+Epoxy)
8	Connection Electrode	Cu
9	Insulation Cover	PP
10	Winding Insulation	Paper + PP

ACCESSOIRES FOR BRACKET MOUNTING (ORDER CODE „Y“)

in mm

MARKING

	BRAND
CBB 131	SERIES DESIGNATION
540µF ±10%	CAPACITANCE AND TOLERANCE
$U_R = 600V_{DC}$	U_R RATED VOLTAGE
$U_{TC} = 3000V$ 50/60 HZ	U_{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
-55~+85°C IEC61071	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
E37F26104	DATE CODE

ORDER CODE

FC	C	A3	DL	427	K	K	136	0	3	1	A	1	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code Examples (μF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminal style	Terminal pitch (mm)	Stud bolt mounting	Can style	Inner Construction	For internal use
Film Cap. = FC	cylindrical = C	600 2S 700 2Q 800 2K 900 R2 1000 3A 1100 A3 1200 3B 1300 O3 1500 C3 1700 F3 2000 3D 2200 D2 2600 3E 2800 L3 3000 3F 3200 3U 3600 3V	CBB131 DL	100 107 220 227 420 427 500 507 1000 108 1100 118	±5% J ±10% K ±20% M	76 H 85 K 86 L 89 M 96 W 116 P 136 T	95 095 120 120 136 136 155 155 175 175 225 225 230 230	Female M5*7 8 Female M6*10 0 Female M8*10 2 Female M8*12 6 Female M10*10 4 Female M10*12 B Male M6*20 1 Male M8*12 9 Male M8*15 A Male M8*17 7 Male M8*20 3 Male M10*20 5	32 3 45 4 50 5 60 6	flat, with Y bracket Y flat, without bracket 0 bolt M12x16 1 bolt M16x25 2 bolt M12x12 3	Style A A Style B B Style C C Style D D Style E E Style F F Style G G Style J J Style K K Style L L Style M M Style P P	1 2 3	

RATINGS

U _r (V _{dc})	C _r (μF)	I _{max}				f ⁽¹⁾ (A)	R _s 20°C, 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	L _s 20°C (nH)	D ±1,0 (mm)	H ±1,0 (mm)	ORDER CODE
		70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)							
600 2S	480	35	50	61	70	4800	1,6	5,1	≤50	76	95	FCC2SDL487#H095#3##1E3
	650	40	57	70	81	5200	1,1	5,6	≤50	85/86	95	FCC2SDL657##095#3##1E3
	650	33	47	58	67	5200	1,9	4,7	≤60	76	120	FCC2SDL657#H120#3##1E3
	770	44	62	76	88	6160	1,2	4,3	≤60	76	136	FCC2SDL777#H136#3##1E3
	880	40	57	69	80	6248	1,3	4,8	≤60	85/86	120	FCC2SDL887##120#3##1E3
	950	41	58	71	82	6650	1,4	4,2	≤60	76	175	FCC2SDL957#H175#3##2E3
	1000	46	66	81	93	6700	1,0	4,6	≤60	85/86	136	FCC2SDL108##136#3##1E3
	1100	40	57	70	81	6600	1,4	4,4	≤50	85/86	155	FCC2SDL118##155#3##2E3
	1200	48	68	83	96	7200	0,8	5,4	≤50	116	95	FCC2SDL128#P095#3##1E3
	1300	48	68	84	96	7800	1,0	4,3	≤60	85/86	175	FCC2SDL138##175#3##2E3
	1600	47	67	82	94	9600	0,9	5,0	≤60	116	120	FCC2SDL168#P120#5##1E3
	1800	47	67	83	95	10800	1,1	4,0	≤60	85/86	225	FCC2SDL188##225#3##2E3
	1900	43	61	75	86	11400	1,1	4,9	≤60	116	136	FCC2SDL198#P136#5##1E3
	2100	60	85	100	100	11550	0,6	4,6	≤60	116	155	FCC2SDL218#P155#5##2E3
	2400	61	86	100	100	12000	0,6	4,5	≤60	116	175	FCC2SDL248#P175#5##2E3
	3000	68	96	100	100	15000	0,8	2,7	≤60	116	230	FCC2SDL308#P230#5##2E3
	5000	71	100	100	100	25000	0,9	2,2	≤80	116	345	FCC2SDL508#P345#5##3E3
5600	79	100	100	100	28000	0,8	2,0	≤80	136	252	FCC2SDL568#T252#5##2E3	
7200	83	100	100	100	36000	0,8	1,8	≤80	136	345	FCC2SDL728#T345#5##3E3	
700 2Q	350	35	50	61	70	3600	1,6	5,1	≤60	76	95	FCC2QDL357#H095#3##1E3
	480	31	45	55	64	3840	2,1	4,7	≤60	76	120	FCC2QDL487#H120#3##1E3
	480	36	51	62	71	3840	1,4	5,6	≤60	85/86	95	FCC2QDL487##095#3##1E3
	580	30	43	52	60	5800	2,4	4,6	≤60	76	136	FCC2QDL587#H136#3##1E3
	620	39	56	68	79	6200	1,5	4,3	≤60	76	155	FCC2QDL627#H155#3##1E3
	700	38	55	67	77	7200	1,6	4,2	≤60	76	175	FCC2QDL707#H175#3##1E3
	750	32	47	57	66	7200	2,0	4,6	≤60	86	136	FCC2QDL757#L136#3##1E3
	780	33	48	59	68	7800	1,9	4,6	≤60	86	136	FCC2QDL787#L136#3##1E3
	920	51	73	89	100	9200	0,7	5,4	≤60	116	95	FCC2QDL927#P095#5##1E3
	950	39	56	68	79	9500	1,5	4,3	≤60	86	175	FCC2QDL957#L175#3##2E3
	1200	44	63	77	89	7200	1,0	5,0	≤60	116	120	FCC2QDL128#P120#5##2E3
	1500	43	61	75	86	9000	1,1	4,9	≤60	116	136	FCC2QDL158#P136#5##1E3
	1500	52	74	90	100	9000	0,8	4,6	≤60	116	155	FCC2QDL158#P155#5##2E3
	1800	47	67	82	94	10800	1,0	4,5	≤60	116	175	FCC2QDL188#P175#5##2E3
	2300	68	96	100	100	13800	0,8	2,7	≤60	116	230	FCC2QDL238#P230#5##2E3
	4200	79	100	100	100	25200	0,8	2,0	≤80	136	252	FCC2QDL428#T252#5##2E3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

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U _R (V _{DC})	C _R (μF)	I _{max}				f̂ ⁽¹⁾ (A)	R _S 20°C, 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	L _S 20°C (nH)	D ±1,0 (mm)	H ±1,0 (mm)	ORDER CODE *R to be defined, see ordering code table
		70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)							
800 2K	280	34	48	59	68	2800	1,7	5,1	≤50	76	95	FCC2KDL287#H095#3##1E3
	370	35	49	60	69	3700	1,5	5,6	≤50	85/86	95	FCC2KDL377##095#3##1E3
	380	31	44	54	62	3800	2,2	4,7	≤60	76	120	FCC2KDL387#H120#3##1E3
	430	28	40	49	57	4300	2,6	4,6	≤60	76	136	FCC2KDL437#H136#3##1E3
	470	38	54	66	76	4700	1,6	4,3	≤60	76	155	FCC2KDL477#H155#3##2E3
	510	35	50	61	70	5100	1,7	4,8	≤60	85/86	120	FCC2KDL517##120#3##1E3
	560	37	53	65	75	5600	1,7	4,2	≤60	76	175	FCC2KDL567#H136#3##2E3
	580	33	48	59	68	5800	1,9	4,6	≤60	85/86	136	FCC2KDL587##136#3##1E3
	640	45	64	79	91	6400	1,1	4,4	≤50	85/86	155	FCC2KDL647##155#3##2E3
	710	41	58	71	82	7100	1,1	5,4	≤50	116	95	FCC2KDL717#P095#3##1E3
	750	42	60	73	85	7500	1,3	4,3	≤60	85/86	175	FCC2KDL757##175#3##2E3
	970	40	58	71	82	7760	1,2	5,0	≤60	116	120	FCC2KDL977#P120#5##1E3
	1000	42	60	73	85	8000	1,4	4,0	≤60	85/86	225	FCC2KDL108##225#3##2E3
	1000	38	54	66	76	8000	1,4	4,9	≤60	116	136	FCC2KDL108#P136#5##1E3
	1200	52	74	90	100	9600	0,8	4,6	≤60	116	155	FCC2KDL128#P155#5##2E3
	1400	53	75	91	100	11200	0,8	4,5	≤60	116	175	FCC2KDL148#P175#5##2E3
	1800	60	86	100	100	11700	1,0	2,7	≤60	116	230	FCC2KDL188#P230#5##2E3
	2000	63	90	100	100	12000	0,7	3,5	≤80	136	175	FCC2KDL208#T175#5##2E3
2700	65	93	100	100	16200	0,8	2,9	≤80	136	230	FCC2KDL278#T230#5##2E3	
3100	70	100	100	100	18600	1,0	2,0	≤80	136	252	FCC2KDL318#T252#5##2E3	
3300	71	100	100	100	19800	0,9	2,2	≤80	116	345	FCC2KDL338#P345#5##3E3	
4300	78	100	100	100	25800	0,9	1,8	≤80	136	345	FCC2KDL438#T345#5##3E3	
900 R2	280	31	44	54	63	2800	2,0	5,1	≤50	76	95	FCCR2DL287#H095#3##1E3
	370	33	47	58	67	3700	1,6	5,6	≤50	85/86	95	FCCR2DL377##095#3##1E3
	380	28	40	49	56	3800	2,6	4,7	≤60	76	120	FCCR2DL387#H120#3##1E3
	430	27	39	47	55	4300	2,9	4,6	≤60	76	136	FCCR2DL437#H136#3##1E3
	470	36	52	64	74	4700	1,7	4,3	≤60	76	155	FCCR2DL477#H155#3##2E3
	510	34	48	59	68	5100	1,8	4,8	≤60	85/86	120	FCCR2DL517##120#3##1E3
	560	34	49	60	69	5600	2,0	4,2	≤60	76	175	FCCR2DL567#H175#3##2E3
	580	32	46	56	64	5800	2,1	4,6	≤60	85/86	136	FCCR2DL587##136#3##1E3
	640	43	62	75	87	6400	1,2	4,4	≤50	85/86	155	FCCR2DL647##155#3##2E3
	710	39	56	68	79	7100	1,2	5,4	≤50	116	95	FCCR2DL717#P095#3##1E3
	750	40	58	71	82	7500	1,4	4,3	≤60	85/86	175	FCCR2DL757##175#3##2E3
	970	39	55	68	79	7600	1,3	5,0	≤60	116	120	FCCR2DL977#P120#5##1E3
	1000	40	58	71	82	8000	1,5	4,0	≤60	85/86	225	FCCR2DL108##225#3##2E3
	1000	36	52	64	74	8000	1,5	4,9	≤60	116	136	FCCR2DL108#P136#5##1E3
	1200	47	66	81	93	9600	1,0	4,6	≤60	116	155	FCCR2DL128#P155#5##2E3
	1400	50	70	86	99	11200	0,9	4,5	≤60	116	175	FCCR2DL148#P175#5##2E3
	1800	58	82	100	100	11700	1,1	2,7	≤60	116	230	FCCR2DL188#P230#5##2E3
	2000	70	100	100	100	12000	0,8	2,5	≤80	136	175	FCCR2DL208#T175#5##2E3
2700	61	88	100	100	16200	0,9	2,9	≤80	136	230	FCCR2DL278#T230#5##2E3	
3100	67	95	100	100	18600	1,1	2,0	≤80	136	252	FCCR2DL318#T252#5##2E3	
3300	67	95	100	100	19800	1,0	2,2	≤80	116	345	FCCR2DL338#P345#5##3E3	
4300	74	100	100	100	25800	1,0	1,8	≤80	136	345	FCCR2DL438#T345#5##3E3	
1000 3A	220	29	40	50	57	2420	2,4	5,1	≤50	76	95	FCC3ADL227#H095#3##1E3
	290	32	46	56	65	3190	1,7	5,6	≤50	85/86	95	FCC3ADL297##095#3##1E3
	300	27	39	48	55	3300	2,8	4,7	≤60	76	120	FCC3ADL307#H120#3##1E3
	330	26	38	47	54	3630	3,0	4,6	≤60	76	136	FCC3ADL337#H136#3##1E3
	360	35	51	62	72	3960	1,8	4,3	≤60	76	155	FCC3ADL367#H155#3##2E3
	400	33	47	57	66	4400	1,9	4,8	≤60	85/86	120	FCC3ADL407##120#3##1E3
	420	34	49	60	69	4620	2,0	4,2	≤60	76	175	FCC3ADL427#H175#3##2E3
	450	32	46	56	64	4950	2,1	4,6	≤60	85/86	136	FCC3ADL457##136#3##1E3
	500	43	62	75	87	5000	1,2	4,4	≤50	85/86	155	FCC3ADL507##155#3##2E3
	540	39	56	68	79	5400	1,2	5,4	≤50	116	95	FCC3ADL547#P095#3##1E3
	560	40	58	71	82	5600	1,4	4,3	≤60	85/86	175	FCC3ADL567##175#3##2E3
	740	39	55	68	79	7400	1,3	5,0	≤60	116	120	FCC3ADL747#P120#5##1E3
	810	45	65	79	91	8100	1,6	3,0	≤60	85/86	225	FCC3ADL817##225#3##2E3
	860	35	51	62	71	8600	1,6	4,9	≤60	116	136	FCC3ADL867#P136#5##1E3
	900	49	70	85	98	8760	0,9	4,6	≤60	116	155	FCC3ADL907#P155#5##2E3
	1100	50	70	86	99	8800	0,9	4,5	≤60	116	175	FCC3ADL118#P175#5##2E3
	1400	58	82	100	100	11200	1,1	2,7	≤60	116	230	FCC3ADL148#P230#5##2E3
	1500	70	100	100	100	12000	0,8	2,5	≤80	136	175	FCC3ADL158#T175#5##2E3
	2100	61	88	100	100	12600	0,9	2,9	≤80	136	230	FCC3ADL218#T230#5##2E3
	2200	64	91	100	100	13200	1,1	2,2	≤80	116	345	FCC3ADL228#P345#5##3E3
2400	67	95	100	100	14400	1,1	2,0	≤80	136	252	FCC3ADL248#T252#5##2E3	
3200	71	100	100	100	19200	1,1	1,8	≤80	136	345	FCC3ADL328#T345#5##3E3	

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

U _R	C _R	I _{max}				î ⁽¹⁾	R _s	R _{th} ⁽²⁾	L _s	D	H	ORDER CODE
		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°C, 1kHz							
(V _{oc})	(µF)	(A)	(A)	(A)	(A)	(A)	20°C, 1kHz (mΩ)	(K/W)	20°C (nH)	±1,0 (mm)	±1,0 (mm)	"*" to be defined, see ordering code table
1100 A3	170	27	38	47	54	2040	2,7	5,1	≤50	76	95	FCCA3DL177#H095#3##1E3
	240	31	43	53	61	2880	1,9	5,6	≤50	85/86	95	FCCA3DL247##095#3##1E3
	240	26	37	45	52	2880	3,1	4,7	≤60	76	120	FCCA3DL247#H120#3##1E3
	270	25	36	44	51	3240	3,4	4,6	≤60	76	136	FCCA3DL277#H136#3##1E3
	300	34	48	59	68	3600	2,0	4,3	≤60	76	155	FCCA3DL307#H155#3##2E3
	320	31	44	53	62	3840	2,2	4,8	≤60	85/86	120	FCCA3DL327##120#3##1E3
	350	32	46	56	64	4200	2,3	4,2	≤60	76	175	FCCA3DL357#H175#3##2E3
	420	30	43	52	60	5040	2,4	4,6	≤60	85/86	136	FCCA3DL427##136#3##1E3
	420	40	57	70	81	5040	1,4	4,4	≤50	85/86	155	FCCA3DL427##155#3##2E3
	450	37	53	65	75	5400	1,3	5,4	≤50	116	95	FCCA3DL457#P095#5##1E3
	480	38	54	66	76	5760	1,6	4,3	≤60	85/86	175	FCCA3DL487##175#3##2E3
	620	36	52	63	73	6200	1,5	5,0	≤60	116	120	FCCA3DL627#P120#5##1E3
	650	37	53	65	75	6500	1,8	4,0	≤60	85/86	225	FCCA3DL657##225#3##2E3
	690	34	49	60	69	6900	1,7	4,9	≤60	116	136	FCCA3DL697#P136#5##1E3
	770	47	66	81	93	7700	1,0	4,6	≤60	116	155	FCCA3DL777#P155#5##2E3
	910	47	67	82	94	9100	1,0	4,5	≤60	116	175	FCCA3DL917#P175#5##2E3
	1200	55	79	96	100	9600	1,2	2,7	≤60	116	230	FCCA3DL128#P230#5##2E3
	1200	66	94	100	100	9600	0,9	2,5	≤80	136	175	FCCA3DL128#T175#5##2E3
1700	58	83	100	100	13600	1,0	2,9	≤80	136	230	FCCA3DL178#T230#5##2E3	
1900	67	95	100	100	15200	1,1	2,0	≤80	136	252	FCCA3DL198#T252#5##2E3	
2000	59	84	100	100	16000	1,3	2,2	≤80	116	345	FCCA3DL208#P345#5##3E3	
2900	74	100	100	100	23200	1,0	1,8	≤80	136	345	FCCA3DL298#T345#5##3E3	
1200 3B	140	26	36	44	51	1680	3,0	5,1	≤50	76	95	FCC3BDL147#H095#3##1E3
	190	29	41	51	58	2280	2,1	5,6	≤50	85/86	95	FCC3BDL197##095#3##1E3
	200	25	35	43	50	2400	3,4	4,7	≤50	76	120	FCC3BDL207#H120#3##1E3
	220	24	34	42	48	2640	3,7	4,6	≤60	76	136	FCC3BDL227#H136#3##1E3
	240	32	46	56	65	2880	2,2	4,3	≤60	76	155	FCC3BDL247#H155#3##2E3
	260	29	42	51	59	3120	2,4	4,8	≤60	85/86	120	FCC3BDL267##120#3##1E3
	280	30	44	53	62	3360	2,5	4,2	≤60	76	175	FCC3BDL287#H175#3##2E3
	300	28	41	50	58	3600	2,6	4,6	≤60	85/86	136	FCC3BDL307##136#3##1E3
	350	38	55	67	78	3960	1,5	4,4	≤50	85/86	155	FCC3BDL357##155#3##2E3
	360	36	51	63	73	4320	1,4	5,4	≤50	116	95	FCC3BDL367#P095#5##1E3
	380	35	51	62	72	4560	1,8	4,3	≤60	85/86	175	FCC3BDL387##175#3##2E3
	500	34	49	59	69	5500	1,7	5,0	≤60	116	120	FCC3BDL507#P120#5##1E3
	540	35	50	61	71	5940	2,0	4,0	≤60	85/86	225	FCC3BDL547##225#3##2E3
	570	32	46	57	66	6270	1,9	4,9	≤60	116	136	FCC3BDL577#P136#5##1E3
	620	44	63	77	89	6820	1,1	4,6	≤60	116	155	FCC3BDL627#P155#5##2E3
	720	45	64	78	90	7920	1,1	4,5	≤60	116	175	FCC3BDL727#P175#5##2E3
	950	53	75	92	100	9500	1,3	2,7	≤60	116	230	FCC3BDL957#P230#5##2E3
	1000	63	89	100	100	10000	1,0	2,5	≤80	136	175	FCC3BDL108#T175#5##2E3
	1400	55	79	97	100	14000	1,1	2,9	≤80	136	230	FCC3BDL148#T230#5##2E3
	1600	64	91	100	100	16000	1,2	2,0	≤80	136	252	FCC3BDL168#T252#5##2E3
1600	67	95	100	100	16000	1,0	2,2	≤80	116	345	FCC3BDL168#P345#5##3E3	
2200	74	100	100	100	23200	1,0	1,8	≤80	136	345	FCC3BDL228#T345#5##3E3	
1300 03	120	24	34	42	49	1440	3,3	5,1	≤50	76	95	FCC03DL127#H095#3##1E3
	160	28	39	48	56	1920	2,3	5,6	≤50	85/86	95	FCC03DL167##095#3##1E3
	160	23	34	42	48	1920	3,7	4,7	≤60	76	120	FCC03DL167#H120#3##1E3
	180	23	33	40	46	2160	4,1	4,6	≤60	76	136	FCC03DL187#H136#3##1E3
	210	31	44	54	62	2520	2,4	4,3	≤60	76	155	FCC03DL217#H155#3##2E3
	220	28	40	49	57	2640	2,6	4,8	≤60	85/86	120	FCC03DL227##120#3##1E3
	240	29	41	51	58	2880	2,8	4,2	≤60	76	175	FCC03DL247#H175#3##2E3
	250	27	39	47	55	3000	2,9	4,6	≤60	85/86	136	FCC03DL257##136#3##1E3
	280	36	52	63	73	3360	1,7	4,4	≤50	85/86	155	FCC03DL287##155#3##2E3
	310	34	48	59	68	3720	1,6	5,4	≤50	116	95	FCC03DL317#P095#5##1E3
	320	34	49	61	70	3840	1,9	4,3	≤60	85/86	175	FCC03DL327##175#3##2E3
	420	33	47	58	67	5040	1,8	5,0	≤60	116	120	FCC03DL427#P120#5##1E3
	450	33	48	58	67	5400	2,2	4,0	≤60	85/86	225	FCC03DL457##225#3##2E3
	480	31	44	54	62	5760	2,1	4,9	≤60	116	136	FCC03DL487#P136#5##1E3
	550	44	63	77	89	6360	1,1	4,6	≤60	116	155	FCC03DL557#P155#5##2E3
	630	45	64	78	90	7560	1,1	4,5	≤60	116	175	FCC03DL637#P175#5##2E3
	820	49	70	86	99	9840	1,5	2,7	≤60	116	230	FCC03DL827#P230#5##2E3
	880	60	85	100	100	10560	1,1	2,5	≤80	136	175	FCC03DL887#T175#5##2E3
	1200	53	76	93	100	13200	1,2	2,9	≤80	136	230	FCC03DL128#T230#5##2E3
	1300	62	88	100	100	14300	1,3	2,0	≤80	136	252	FCC03DL138#T252#5##2E3
	1400	61	87	100	100	15400	1,2	2,2	≤80	116	345	FCC03DL148#P345#5##3E3
	1900	68	96	100	100	20900	1,2	1,8	≤80	136	345	FCC03DL198#T345#5##3E3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

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U _R (V _{oc})	C _R (μF)	I _{max}				î ⁽¹⁾ (A)	R _s 20°C, 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	L _s 20°C (nH)	D ±1,0 (mm)	H ±1,0 (mm)	ORDER CODE *R* to be defined, see ordering code table
		70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)							
1500 C3	170	26	37	45	52	2040	3,1	4,8	≤60	85/86	120	FCCC3DL177##120#3##1E3
	210	33	48	58	67	2520	2,0	4,4	≤60	85/86	155	FCCC3DL217##155#3##2E3
	310	30	44	53	62	3720	2,1	5,0	≤60	116	120	FCCC3DL317#P120#5##1E3
	330	31	45	55	63	3960	2,5	4,0	≤60	85/86	225	FCCC3DL337##225#3##2E3
	400	39	56	68	79	4800	1,4	4,6	≤60	116	155	FCCC3DL407#P155#5##2E3
	600	46	66	81	93	7200	1,7	2,7	≤60	116	230	FCCC3DL607#P230#5##2E3
	1000	70	100	100	100	12000	1,0	2,0	≤80	136	252	FCCC3DL108#T252#5##2E3
	1000	67	95	100	100	12000	1,0	2,2	≤80	116	345	FCCC3DL108#P345#5##3E3
1400	74	100	100	100	16800	1,0	1,8	≤80	136	345	FCCC3DL148#T345#5##3E3	
1700 F3	130	24	35	42	49	1560	3,5	4,8	≤60	85/86	120	FCCF3DL137##120#3##1E3
	160	31	44	54	63	1920	2,3	4,4	≤60	85/86	155	FCCF3DL167##155#3##2E3
	240	28	41	50	58	2880	2,4	5,0	≤60	116	120	FCCF3DL247#P120#5##1E3
	250	29	42	51	59	3000	2,9	4,0	≤60	85/86	225	FCCF3DL257##225#3##2E3
	300	37	52	64	74	3600	1,6	4,6	≤60	116	155	FCCF3DL307#P155#5##2E3
	460	45	64	79	91	5520	1,8	2,7	≤60	116	230	FCCF3DL467#P230#5##2E3
	760	52	75	91	100	9120	1,8	2,0	≤80	136	252	FCCF3DL767#T252#5##2E3
2000 3D	100	23	32	40	46	1200	4,0	4,8	≤60	85/86	120	FCC3DDL107##120#3##1E3
	120	30	43	52	60	1440	2,5	4,4	≤60	85/86	155	FCC3DDL127##155#3##2E3
	190	27	38	47	54	2280	2,7	5,0	≤60	116	120	FCC3DDL197#P120#5##1E3
	190	27	39	48	55	2280	3,3	4,0	≤60	85/86	225	FCC3DDL197##225#3##2E3
	240	35	49	60	70	2880	1,8	4,6	≤60	116	155	FCC3DDL247#P155#5##2E3
	370	41	58	71	82	4440	2,2	2,7	≤60	116	230	FCC3DDL377#P230#5##2E3
	600	61	87	100	100	6000	1,2	2,2	≤80	116	345	FCC3DDL607#P345#5##3E3
	600	64	91	100	100	6000	1,2	2,0	≤80	136	252	FCC3DDL607#T252#5##1E3
	800	71	100	100	100	9600	1,1	1,8	≤80	136	345	FCC3DDL807#T345#5##3E3
2200 D2	90	24	34	42	48	1080	3,7	4,6	≤60	86	136	FCCD2DL906#L136#3##1E3
	140	30	43	52	60	1680	2,2	5,0	≤60	116	120	FCCD2DL147#P120#5##2E3
	150	36	51	63	73	1800	1,9	4,0	≤60	86	225	FCCD2DL157#L225#3##2E3
	170	29	42	51	59	2040	2,5	4,6	≤60	116	155	FCCD2DL177#P155#5##2E3
	210	45	64	78	90	2520	1,1	4,5	≤60	116	175	FCCD2DL217#P175#5##2E3
	290	51	73	89	100	3480	1,4	2,7	≤60	116	230	FCCD2DL297#P230#5##2E3
	400	53	76	93	100	4800	1,2	2,9	≤80	136	230	FCCD2DL407#T230#5##2E3
	450	61	87	100	100	5400	1,2	2,2	≤80	116	345	FCCD2DL457#P345#5##3E3
	500	62	87	100	100	6000	1,3	2,0	≤80	136	252	FCCD2DL507#T252#5##2E3
	660	71	100	100	100	7920	1,1	1,8	≤80	136	345	FCCD2DL667#T345#5##3E3
	2600 3E	63	23	33	41	47	756	4,1	4,4	≤60	86	155
100		32	46	56	65	1200	2,4	4,0	≤60	86	225	FCC3EDL107#L225#3##1E3
100		30	44	53	62	1200	2,1	5,0	≤60	116	120	FCC3EDL107#P120#5##2E3
120		28	40	49	57	1440	2,7	4,6	≤60	116	155	FCC3EDL127#P155#5##2E3
140		43	61	75	86	1680	1,2	4,5	≤60	116	175	FCC3EDL147#P175#5##2E3
200		49	70	86	99	2400	1,5	2,7	≤60	116	230	FCC3EDL207#P230#5##1E3
200		60	85	100	100	2400	1,1	2,5	≤80	136	175	FCC3EDL207#T175#5##2E3
280		51	73	89	100	3360	1,3	2,9	≤80	136	230	FCC3EDL287#T230#5##2E3
320		56	81	99	100	3840	1,4	2,2	≤80	116	345	FCC3EDL327#P345#5##3E3
340		59	85	100	100	4080	1,4	2,0	≤80	136	252	FCC3EDL347#T252#5##2E3
450		65	92	100	100	5400	1,3	1,8	≤80	136	345	FCC3EDL457#T345#5##3E3
2800 L3		86	28	40	49	57	1032	2,5	5,0	≤60	116	120
	88	33	48	58	67	1056	2,2	4,0	≤60	86	225	FCCL3DL886#L225#3##1E3
	100	26	38	46	53	1200	2,9	4,9	≤60	116	136	FCCL3DL107#P136#5##1E3
	120	33	46	56	65	1440	2,1	4,5	≤60	116	175	FCCL3DL127#P175#5##2E3
	170	51	73	89	100	2040	1,5	2,5	≤80	136	175	FCCL3DL177#T175#5##2E3
	240	49	70	87	100	2880	1,4	2,9	≤80	136	230	FCCL3DL247#T230#5##2E3
	270	56	81	99	100	3240	1,4	2,2	≤80	116	345	FCCL3DL277#P345#5##3E3
	290	55	79	97	100	3480	1,6	2,0	≤80	136	252	FCCL3DL297#T252#5##2E3
	390	68	92	100	100	4680	1,2	1,8	≤80	136	345	FCCL3DL397#T345#5##3E3
3000 3F	46	21	31	38	43	552	4,6	4,6	≤60	86	136	FCC3FDL466#L136#3##1E3
	74	27	39	48	55	888	2,6	5,0	≤60	116	120	FCC3FDL746#P120#5##1E3
	75	32	47	57	66	900	2,3	4,0	≤60	86	225	FCC3FDL756#L225#3##1E3
	100	41	58	72	83	1200	1,3	4,5	≤60	116	175	FCC3FDL107#P175#5##2E3
	140	50	71	87	100	1680	1,6	2,5	≤80	136	175	FCC3FDL147#T175#5##2E3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

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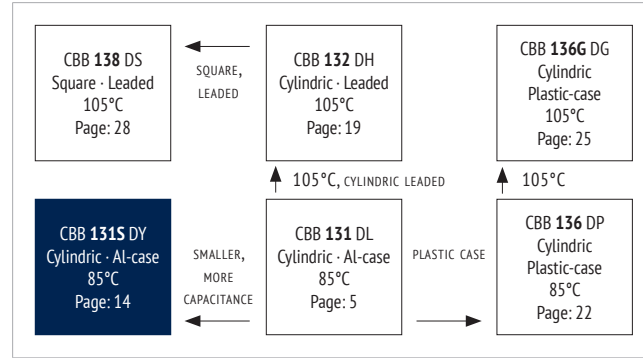
U _R (V _{DC})	C _R (μF)	I _{max}				İ̇ ⁽¹⁾ (A)	R _s 20°C, 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	L _s 20°C (nH)	D ±1,0 (mm)	H ±1,0 (mm)	ORDER CODE
		70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)							
3000 3F	200	49	70	86	99	2400	1,4	2,9	≤80	136	230	FCC3FDL207#T230#S##2E3
	240	64	91	100	100	2880	1,1	2,2	≤80	116	345	FCC3FDL247#P345#S##3E3
	250	64	91	100	100	3000	1,2	2,0	≤80	136	252	FCC3FDL257#T252#S##2E3
	330	74	100	100	100	3960	1,0	1,8	≤80	136	345	FCC3FDL337#T345#S##3E3
3200 3U	64	28	41	50	58	768	2,4	5,0	≤60	116	120	FCC3UDL646#P120#S##1E3
	65	22	32	39	45	780	4,9	4,0	≤60	86	225	FCC3UDL656#L225#3##1E3
	92	41	58	72	83	1104	1,3	4,5	≤60	116	175	FCC3UDL926#P175#S##2E3
	120	48	69	84	97	1440	1,7	2,5	≤80	136	175	FCC3UDL127#T175#S##2E3
	180	49	70	86	99	2160	1,4	2,9	≤80	136	230	FCC3UDL187#T230#S##2E3
	210	59	83	100	100	2520	1,3	2,2	≤80	116	345	FCC3UDL217#P345#S##3E3
	220	59	85	100	100	2640	1,4	2,0	≤80	136	252	FCC3UDL227#T252#S##2E3
	300	68	96	100	100	3600	1,2	1,8	≤80	136	345	FCC3UDL307#T345#S##3E3
3600 3V	44	29	42	51	59	528	2,3	5,0	≤60	116	120	FCC3VDL446#P120#S##1E3
	45	35	50	61	71	540	2,0	4,0	≤60	86	225	FCC3VDL456#L225#3##1E3
	88	51	73	89	100	1056	1,4	2,7	≤60	116	230	FCC3VDL886#P230#S##2E3
	120	51	73	89	100	1440	1,3	2,9	≤80	136	230	FCC3VDL127#T230#S##2E3
	160	61	86	100	100	1920	1,2	2,2	≤80	116	345	FCC3VDL167#P345#S##3E3
	170	62	88	100	100	2040	1,3	2,0	≤80	136	252	FCC3VDL177#T252#S##2E3
	230	74	100	100	100	2760	1,0	1,8	≤80	136	345	FCC3VDL237#T345#S##3E3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

FEATURES

- DC-Link
- Miniaturized
- Higher Capacitance
- Low ESR, high Currents
- Self-healing
- Long Lifetime
- Aluminum case

OVERVIEW



PRODUCT



APPLICATIONS

- Photovoltaic and wind inverters
- Electric and hybrid electric vehicles
- Motion control, welding equipment, elevators
- High power frequency converters

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/85/56 (IEC 61071)
Operating Temperature	-40 ~ +85 °C ($\theta_{hotspot} \leq 85$ °C)
Storage Temperature	-40 ~ +85 °C
Rated Voltage U_{RDC}	600 ~ 1.500V _{DC}
Capacitance Range	110 ~ 1.600 μ F
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 * U_{RDC}$ (20 °C, 10 s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000V_{AC}$ (20 °C, 50Hz, 10s)
Max. Overvoltage	1,1 * U_{RDC} (30 % of time under load) 1,15 * U_{RDC} (30 min. per day) 1,2 * U_{RDC} (5 min. per day) 1,3 * U_{RDC} (1 min. per day) 1,5 * U_{RDC} (max. 30 ms, 100ms per day)
Insulation Resistance R_i *C	$\geq 10.000 M\Omega * \mu$ F (20 °C, 100 V _{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_0$	$\leq 2 * 10^{-4}$ (20 °C, 100 Hz)
Life Time Expectancy	$\geq 100.000h$, failure rate ≤ 50 FIT ($\theta_{hotspot} \leq 70^\circ C, U_{RDC}$)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

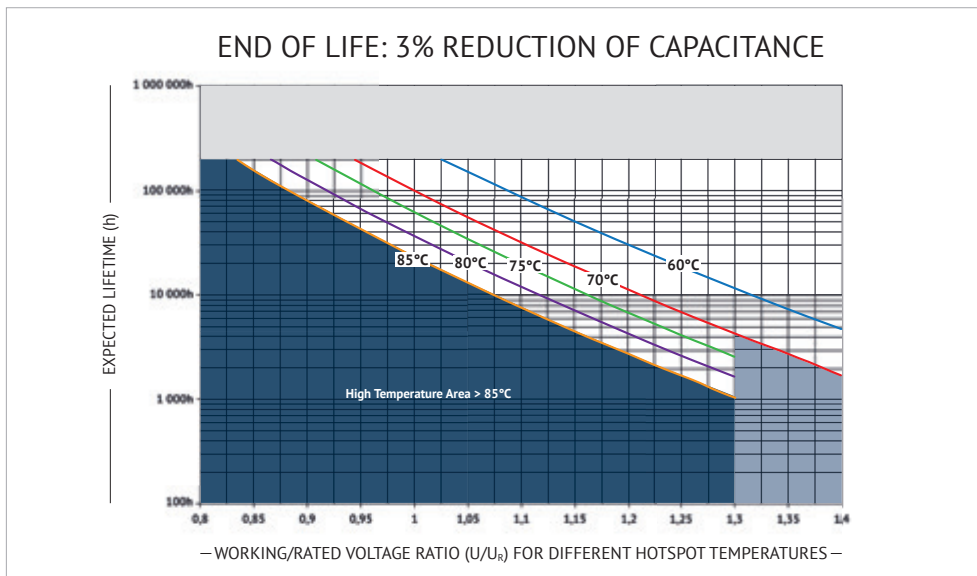
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

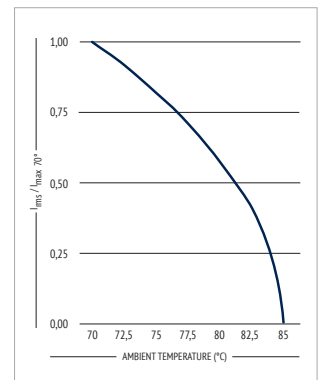
APPROVALS

UL94-V0:
Plastic & Compound Mass

LIFETIME



CURRENT DERATING



DC-LINK

■ CAN STYLES

CAN STYLE J/K

H1=H+5mm

Aluminum/Plastic Case
Anti-Creep Insulation

$D_t = 12\text{mm}$

M6*10 screw female*

*preferred

in mm

■ DIMENSIONS

Diameter D	Can Style	Pitch P	Length Cab Lc	Diameter Terminal D_t
$\pm 1,0\text{ mm}$		$\pm 0,5\text{mm}$	$\pm 1,0\text{ mm}$	$\pm 0,5\text{mm}$
76	J	32	10	12
86	J	32	10	12
86	K	32	32	12

Max. Torque for terminals: 3 Nm (M5), 5 Nm (M6), 6 Nm (M8), 8 Nm (M10)
 Max. Torque for stud mounting screws: 12 Nm (M12), 15Nm (M16)

DC-LINK

■ ORDER CODE

FC	C	2S	DY	107	K	H	136	0	3	1	J	1	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code Examples (μF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminal style	Terminal pitch (mm)	Stud bolt mounting	Can style	Inner Construction	For internal use
Film Cap. = FC	cylindrical = C	600 2S 750 2G 800 2K 900 R2 1000 3A 1100 A3 1200 3B 1500 C3	CBB131S DY	100 107 220 227 420 427 500 507 1000 108 1100 118	$\pm 5\%$ J $\pm 10\%$ K $\pm 20\%$ M	76 H 86 L	95 095 120 120 136 136 155 155 175 175	Female M5*7 8 Female M6*10 0 Female M8*10 2 Female M8*12 6 Female M10*10 4 Female M10*12 B Male M6*20 1 Male M8*12 9 Male M8*15 A Male M8*17 7 Male M8*20 3 Male M10*20 5	32 3	flat, with Y bracket Y flat, without bracket 0 bolt M12x16 1 bolt M16x25 2 bolt M12x12 3	Style J J Style K K	1 2	

INTERNAL CONSTRUCTION

(Example: Can Style J, double inner construction)

NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn
4	Terminals	Cu, Sn-plated
5	Deck	PC
6	Aluminum Case	Al
7	Potting Compound	PU resin (+Epoxy)
8	Connection Electrode	Cu
9	Insulation Cover	PP
10	Winding Insulation	Paper + PP

ACCESSOIRES FOR BRACKET MOUNTING (ORDER CODE „Y“)

in mm

MARKING

	BRAND
CBB 131S	SERIES DESIGNATION
540µF ±10%	CAPACITANCE AND TOLERANCE
U_R = 600V_{DC} SH	U _R RATED VOLTAGE
U_{TC} = 3000V 50/60 HZ	U _{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
-40~+85°C IEC61071	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
JE37F26104	DATE CODE

DC-LINK

RATINGS

U _r (V _{oc})	C _r (μF)	I _{max}				f ⁽¹⁾ (A)	R _s (mΩ)	R _{th} ⁽²⁾ (K/W)	L _s (nH)	D ±1,0 (mm)	H H1=H+5mm ±1,0 (mm)	ORDER CODE	
		70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)								
600 2S	570	36	51	63	72	1600	1,5	5,1	≤50	76	95	FCC2SDY577#H095#3##2E3	
	700	36	51	62	71	2100	1,4	5,6	≤50	86	95	FCC2SDY707#L095#3##2E3	
	800	34	49	60	69	1650	1,8	4,7	≤60	76	120	FCC2SDY807#H120#3##2E3	
	950	33	47	58	67	1670	2,1	4,3	≤60	76	155	FCC2SDY957#H155#3##2E3	
	1000	45	65	70	70	3200	1,1	4,3	≤60	76	155	FCC2SDY108#H155#3##2E3	
	1100	37	53	65	75	2300	1,5	4,8	≤60	86	120	FCC2SDY118#L120#3##2E3	
	1200	46	66	70	70	2150	1,1	4,2	≤60	76	175	FCC2SDY128#H175#3##2E3	
	1200	35	51	62	70	2150	1,7	4,6	≤60	86	136	FCC2SDY128#L136#3##2E3	
	1300	36	52	63	70	2230	1,7	4,4	≤60	86	155	FCC2SDY138#L155#3##2E3	
	1400	47	67	70	70	4550	1,0	4,4	≤60	86	155	FCC2SDY148#L155#3##2E3	
1600	48	68	70	70	4500	1,0	4,3	≤60	86	175	FCC2SDY168#L175#3##2E3		
750 2G	500	35	50	61	70	1680	1,6	5,1	≤50	76	95	FCC2GDY507#H095#3##2E3	
	660	36	51	62	71	2200	1,4	5,6	≤50	86	95	FCC2GDY667#L095#3##2E3	
	700	32	46	56	65	1680	2,0	4,7	≤60	76	120	FCC2GDY707#H120#3##2E3	
	850	31	45	55	64	1680	2,3	4,3	≤60	76	155	FCC2GDY857#H155#3##2E3	
	900	45	65	70	70	3350	1,1	4,3	≤60	76	155	FCC2GDY907#H155#3##2E3	
	900	35	50	61	70	3350	1,7	4,8	≤60	86	120	FCC2GDY907#L120#3##2E3	
	1000	44	63	70	70	3200	1,2	4,2	≤60	76	175	FCC2GDY108#H175#3##2E3	
	1100	34	49	60	70	2260	1,8	4,6	≤60	86	136	FCC2GDY118#L136#3##2E3	
	1200	35	50	62	70	2350	1,8	4,4	≤60	86	155	FCC2GDY128#L155#3##1E3	
	1200	47	67	70	70	2350	1,0	4,4	≤60	86	155	FCC2GDY128#L155#3##2E3	
	1400	48	68	70	70	4500	1,0	4,3	≤50	86	175	FCC2GDY148#L175#3##2E3	
	800 2K	350	34	48	59	68	1550	1,7	5,1	≤50	76	95	FCC2KDY357#H095#3##2E3
490		35	49	60	69	2000	1,5	5,6	≤50	86	95	FCC2KDY497#L095#3##2E3	
500		31	45	55	64	1600	2,1	4,7	≤60	76	120	FCC2KDY507#H120#3##2E3	
600		31	44	54	62	1590	2,4	4,3	≤60	76	155	FCC2KDY607#H155#3##1E3	
650		45	65	70	70	3200	1,1	4,3	≤60	76	155	FCC2KDY657#H155#3##2E3	
650		34	48	59	68	3200	1,8	4,8	≤60	86	120	FCC2KDY657#L120#3##2E3	
730		44	63	70	70	3100	1,2	4,2	≤60	76	175	FCC2KDY737#H175#3##2E3	
770		33	48	59	68	2100	1,9	4,6	≤60	86	136	FCC2KDY777#L136#3##2E3	
780		33	48	58	67	2150	2,0	4,4	≤60	86	155	FCC2KDY787#L155#3##2E3	
850		47	67	70	70	4100	1,0	4,4	≤60	86	155	FCC2KDY857#L155#3##2E3	
950		45	65	70	70	4130	1,1	4,3	≤60	86	175	FCC2KDY957#L175#3##2E3	
900 R2		350	34	48	59	68	1500	1,7	5,1	≤50	76	95	FCCR2DY357#H095#3##2E3
		490	35	49	60	69	2000	1,5	5,6	≤50	86	95	FCCR2DY497#L095#3##2E3
	500	31	45	55	64	1600	2,1	4,7	≤60	76	120	FCCR2DY507#H120#3##2E3	
	600	31	44	54	62	1580	2,4	4,3	≤60	76	155	FCCR2DY607#H155#3##2E3	
	650	45	65	70	70	3100	1,1	4,3	≤60	76	155	FCCR2DY657#H155#3##2E3	
	650	34	48	59	68	3100	1,8	4,8	≤60	86	120	FCCR2DY657#L120#3##2E3	
	730	44	63	70	70	3200	1,2	4,2	≤60	76	175	FCCR2DY737#H175#3##2E3	
	770	33	48	59	68	2100	1,9	4,6	≤60	86	136	FCCR2DY777#L136#3##2E3	
	780	33	48	58	67	2150	2,0	4,4	≤60	86	155	FCCR2DY787#L155#3##2E3	
	850	47	67	70	70	4000	1,0	4,4	≤60	86	155	FCCR2DY857#L155#3##2E3	
	950	45	65	70	70	4150	1,1	4,3	≤60	86	175	FCCR2DY957#L175#3##2E3	
	1000 3A	300	32	45	56	64	1500	1,9	5,1	≤50	76	95	FCC3ADY307#H095#3##2E3
400		31	44	54	62	1580	2,2	4,7	≤60	76	120	FCC3ADY407#H120#3##2E3	
400		33	47	58	67	1580	1,6	5,6	≤50	86	95	FCC3ADY407#L095#3##2E3	
490		29	42	52	60	1600	2,6	4,3	≤60	76	155	FCC3ADY497#H155#3##2E3	
520		44	62	70	70	1600	1,2	4,3	≤60	76	155	FCC3ADY527#H155#3##2E3	
540		33	47	57	66	2000	1,9	4,8	≤60	86	120	FCC3ADY547#L120#3##2E3	
590		42	61	70	70	3000	1,3	4,2	≤60	76	175	FCC3ADY597#H175#3##2E3	
600		32	47	57	66	3120	2,0	4,6	≤60	86	136	FCC3ADY607#L136#3##2E3	
640		32	47	57	66	3250	2,1	4,4	≤60	86	155	FCC3ADY647#L155#3##2E3	
680		45	64	70	70	3280	1,1	4,4	≤60	86	155	FCC3ADY687#L155#3##2E3	
780		45	65	70	70	4000	1,1	4,3	≤60	86	175	FCC3ADY787#L175#3##2E3	
1100 A3		220	31	44	54	63	1550	2,0	5,1	≤50	76	95	FCCA3DY227#H095#3##2E3
	300	29	41	51	58	1600	2,5	4,7	≤60	76	120	FCCA3DY307#H120#3##2E3	
	300	32	46	56	65	1600	1,7	5,6	≤50	86	95	FCCA3DY307#L095#3##2E3	
	350	27	39	48	56	1650	3,0	4,3	≤60	76	155	FCCA3DY357#H155#3##2E3	

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

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DC-LINK

U _R (V _{DC})	C _R (μF)	I _{max}				Î ⁽¹⁾ (A)	R _S 20°C, 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	L _S 20°C (nH)	D ±1,0 (mm)	H H1-H+5mm ±1,0 (mm)	ORDER CODE
		70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)							
1100 A3	400	42	60	70	70	3100	1,3	4,3	≤60	76	155	FCCA3DY407#H155#3##2E3
	400	31	45	55	63	3100	2,1	4,8	≤60	86	120	FCCA3DY407#L120#3##2E3
	430	30	43	52	60	3250	2,4	4,6	≤60	86	136	FCCA3DY437#L136#3##2E3
	440	41	58	70	70	3280	1,4	4,2	≤60	76	175	FCCA3DY447#H175#3##2E3
	500	43	62	70	70	3940	1,2	4,4	≤60	86	155	FCCA3DY507#L155#3##2E3
	580	44	62	70	70	3980	1,2	4,3	≤60	86	175	FCCA3DY587#L175#3##2E3
1200 3B	180	31	43	53	61	1520	2,1	5,1	≤60	76	95	FCC3BDY187#H095#3##2E3
	250	27	39	48	55	1980	2,8	4,7	≤60	76	120	FCC3BDY257#H120#3##2E3
	250	31	45	55	63	1980	1,8	5,6	≤50	86	95	FCC3BDY257#L095#3##2E3
	330	42	59	70	70	2130	1,3	4,3	≤60	76	155	FCC3BDY337#H155#3##2E3
	370	41	58	70	70	2590	1,4	4,2	≤60	76	175	FCC3BDY377#H175#3##2E3
	380	29	42	51	59	2600	2,5	4,6	≤60	86	136	FCC3BDY387#L136#3##2E3
	400	29	42	51	59	2800	2,6	4,4	≤60	86	155	FCC3BDY407#L155#3##2E3
	420	43	62	70	70	3000	1,2	4,4	≤60	86	155	FCC3BDY427#L155#3##2E3
	480	42	60	70	70	3190	1,3	4,3	≤60	86	175	FCC3BDY487#L175#3##2E3
1500 C3	110	27	39	48	55	1340	2,6	5,1	≤50	76	95	FCCC3DY117#H095#3##2E3
	140	28	40	49	57	1360	2,2	5,6	≤50	86	95	FCCC3DY147#L095#3##2E3
	150	25	36	44	51	1420	3,3	4,7	≤60	76	120	FCCC3DY157#H120#3##2E3
	160	24	34	42	48	1450	4,0	4,3	≤60	76	155	FCCC3DY167#H155#3##2E3
	180	38	54	66	70	1560	1,6	4,3	≤60	76	155	FCCC3DY187#H155#3##2E3
	180	28	39	48	56	1560	2,7	4,8	≤60	86	120	FCCC3DY187#L120#3##2E3
	200	37	53	65	70	2200	1,7	4,2	≤60	76	175	FCCC3DY207#H175#3##2E3
	220	26	37	46	53	2460	3,1	4,6	≤60	86	136	FCCC3DY227#L136#3##2E3
	240	40	57	70	70	2590	1,4	4,4	≤60	86	155	FCCC3DY247#L155#3##2E3
	270	39	56	68	70	3100	1,5	4,3	≤60	86	175	FCCC3DY277#L175#3##2E3

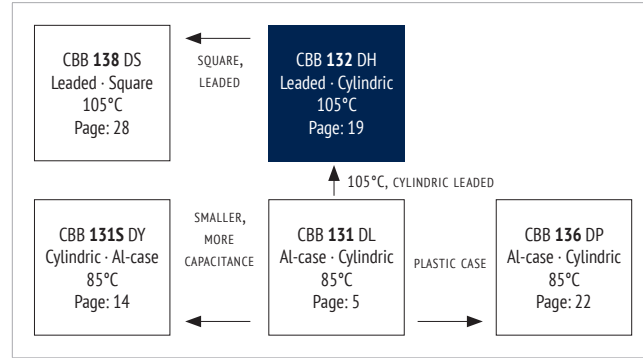
(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

DC-LINK

FEATURES

- DC-Link
- 105°C Type
- High ripple current capability
- Self-healing
- Long lifetime
- Plastic case
- Soldering Style

OVERVIEW



PRODUCT



APPLICATIONS

- High power frequency converters
- Motion control, welding equipment, elevators
- Photovoltaic and wind inverters

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\theta_{hotspot} \leq 105$ °C) $\theta_{hotspot} = 85-105$ °C: See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	600 ~ 1.200 V_{DC}
Capacitance Range	25 ~ 145 μF
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 * U_{RDC}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{AC}$ (20°C, 50 Hz, 10s)
Max. Overvoltage	$1,1 * U_{RDC}$ (30 % of time under load) $1,15 * U_{RDC}$ (30 min. per day) $1,2 * U_{RDC}$ (5 min. per day) $1,3 * U_{RDC}$ (1 min. per day) $1,5 * U_{RDC}$ (max. 30 ms, 100ms per day)
Insulation Resistance R_i °C	$\geq 5.000 M\Omega * \mu F$ (20°C, 100 V_{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_o$	$\leq 2 * 10^{-4}$ (20°C, 100 Hz)
Life Time Expectancy	$\geq 100.000h$, failure rate ≤ 50 FIT ($\theta_{hotspot} \leq 70$ °C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

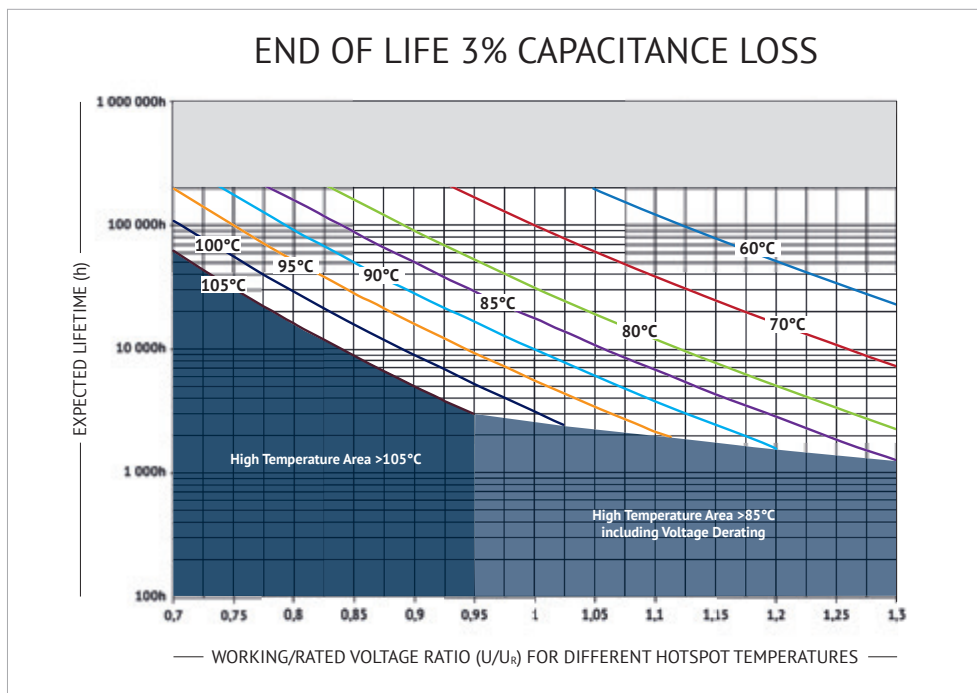
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

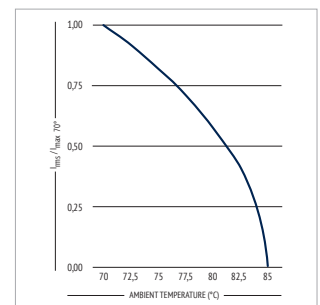
APPROVALS

- UL94-V0:**
Plastic & Compound Mass
- UL810:**
CZDS2.E227010 (Construction)

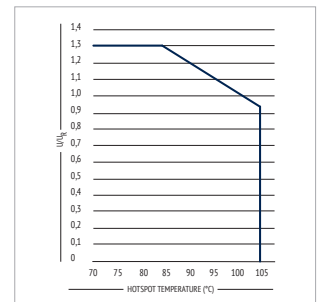
LIFETIME



CURRENT DERATING



VOLTAGE DERATING



DC-LINK

DIMENSIONS

STYLE A
NO SOCKET,
4 SOLDERING PINS

STYLE B
WITH SOCKET,
4 SOLDERING PINS
W TYPICALLY 8MM+/-1MM
L2 TYPICALLY 1,5MM+/-1MM

in mm

DC-LINK

INTERNAL CONSTRUCTION

NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn
4	Terminals	Cu, Sn-plated
5	Potting Compound	Epoxy
6	Connection Electrode Case	Cu

MARKING

BRAND

CBB 132

60μF J 800V

J02F12

PRODUCT SERIES

CAPACITANCE, TOLERANCE AND RATED VOLTAGE

DATE CODE

ORDER CODE

FC	C	3A	DH	117	K	K	061	W	4	A	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code Examples (µF)	Capacitance tolerance	Diameter (mm)	Height L ₁ (mm)	Terminal style P2	Bottom Bolt	Style	For internal use
Film Cap. = FC	cylindrical = C	600 2S 800 2K 1000 3A 1200 3B	CBB 132 = DH	50 506 75 756 80 806 110 117 120 127 145 157 200 207 220 227	±5% J ±10% K	50 D 56,3 C 63,5 E 35,9 X	59,0 059 61,3 061 70,6 071	12,7 W	M8*10 4 without 0	A A B B	

RATINGS

U _r ≤85°C (V _{DC})	C _r (µF)	I _{max}					I ⁽¹⁾ (A)	R _s 20°C, 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	dV/dt 20°C (V/µs)	D ±0,5 (mm)	L ±0,8 (mm)	L ₁ ±1,3 (mm)	P ₁ ±0,5 (mm)	P ₂ ±0,5 (mm)	ORDER CODE
		70°C 10kHz (A)	60°C 10kHz (A)	50°C 10kHz (A)	≤40°C 10kHz (A)	≤40°C 10kHz (A)										
600 2S	30	12,4	17	21	24	847	8,0	8,1	28	35,9	53,7	61,3	5,4	12,7	FCC2SDH306#X061W##E3	
	110	25	35	43	50	1650	3,5	4,6	15	50,0	63,0	70,6	5,1	12,7	FCCS2SDH117#D071W##E3	
	145	35	49	60	70	2175	2,8	2,9	15	56,3	63,0	70,6	5,1	12,7	FCCS2SDH157#C071W##E3	
	145	35	49	60	70	2900	2,5	3,3	20	63,5	51,4	59,0	5,1	12,7	FCCS2SDH157#E059W##E3	
800 2K	60	16	22	27	32	900	5,0	7,8	15	50,0	63,0	70,6	5,1	12,7	FCC2KDH606#D071W##E3	
	90	20	28	34	40	1350	4,0	6,3	15	56,3	63,0	70,6	5,1	12,7	FCC2KDH906#C071W##E3	
	90	20	28	34	40	1800	3,0	8,3	20	63,5	51,4	59,0	5,1	12,7	FCC2KDH906#E059W##E3	
1000 3A	45	15	21	25	30	675	6,0	7,4	15	50,0	63,0	70,6	5,1	12,7	FCCS3ADH456#D071W##E3	
	60	18	25	31	36	900	5,0	6,2	15	56,3	63,0	70,6	5,1	12,7	FCCS3ADH606#C071W##E3	
	60	18	25	31	36	1200	4,5	6,9	20	63,5	51,4	59,0	5,1	12,7	FCCS3ADH606#E059W##E3	
1200 3B	25	10	14	17	20	500	8,9	11,2	20	50,0	63,0	70,6	5,1	12,7	FCCS3BDH256#D071W##E3	
	35	15	21	25	30	700	6,0	7,4	20	56,3	63,0	70,6	5,1	12,7	FCCS3BDH356#C071W##E3	
	35	15	21	25	30	875	5,5	8,1	25	63,5	51,4	59,0	5,1	12,7	FCCS3BDH356#E059W##E3	

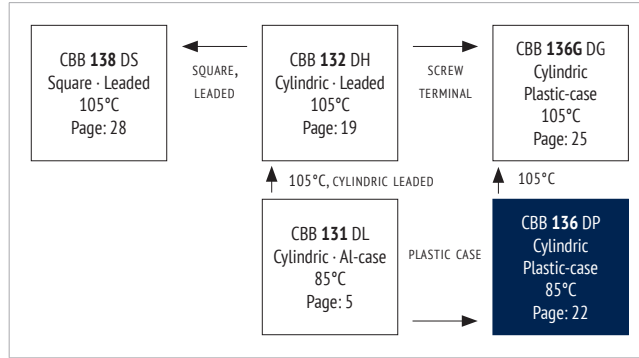
(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

DC-LINK

FEATURES

- DC-Link
- Very low dissipation factor
- High ripple current capability
- Self-healing
- Long lifetime
- Plastic case

OVERVIEW



PRODUCT



APPLICATIONS

- High power frequency converters
- Motion control, welding equipment, elevators
- Photovoltaic and wind inverters

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/85/56 (IEC 61071)
Operating Temperature	-40 ~ +85 °C ($\theta_{hotspot} \leq 85$ °C)
Storage Temperature	-40 ~ +85 °C
Rated Voltage U_{RDC}	600 ~ 1.200 V _{DC}
Capacitance Range	60 ~ 645 μ F
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 * U_{RDC}$ (20°C, 10 s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{AC}$ (20°C, 50 Hz, 10 s)
Max. Overvoltage	$1,1 * U_{RDC}$ (30 % of time under load) $1,15 * U_{RDC}$ (30 min. per day) $1,2 * U_{RDC}$ (5 min. per day) $1,3 * U_{RDC}$ (1 min. per day) $1,5 * U_{RDC}$ (max. 30 ms, 100ms per day)
Insulation Resistance R_i °C	$\geq 5.000 M\Omega * \mu$ F (20°C, 100 V _{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_o$	$\leq 2 * 10^{-4}$ (20°C, 100 Hz)
Life Time Expectancy	≥ 100.000 h, failure rate ≤ 50 FIT ($\theta_{hotspot} \leq 70$ °C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

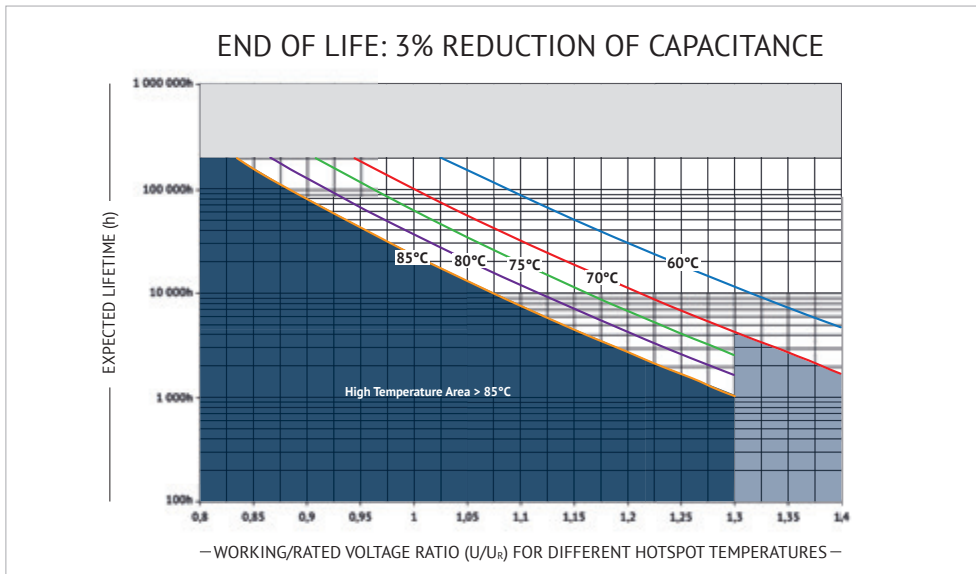
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

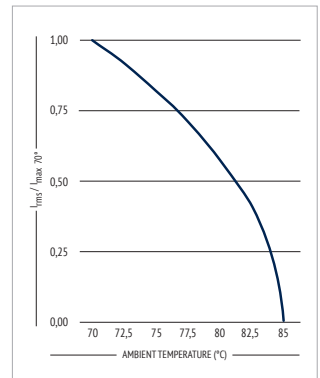
APPROVALS

- UL94-V0:**
Plastic & Compound Mass
- UL810:**
CZDS2.E227010 (Construction)

LIFETIME

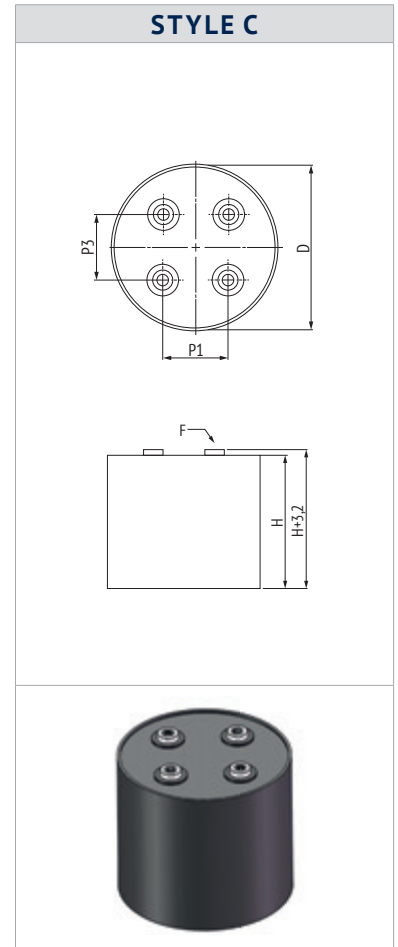
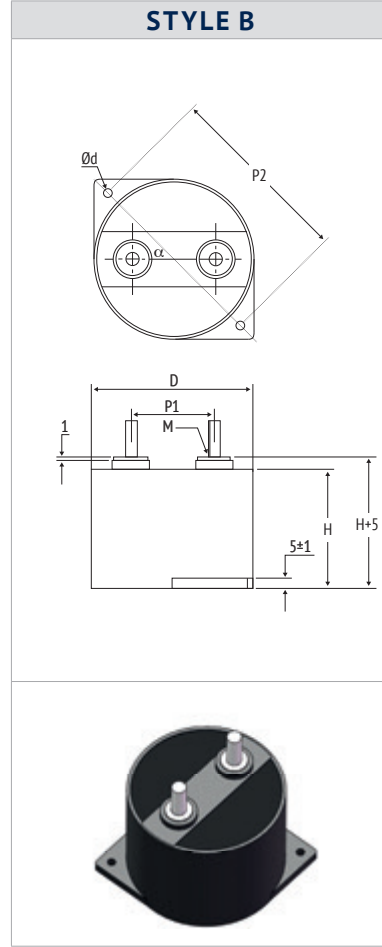
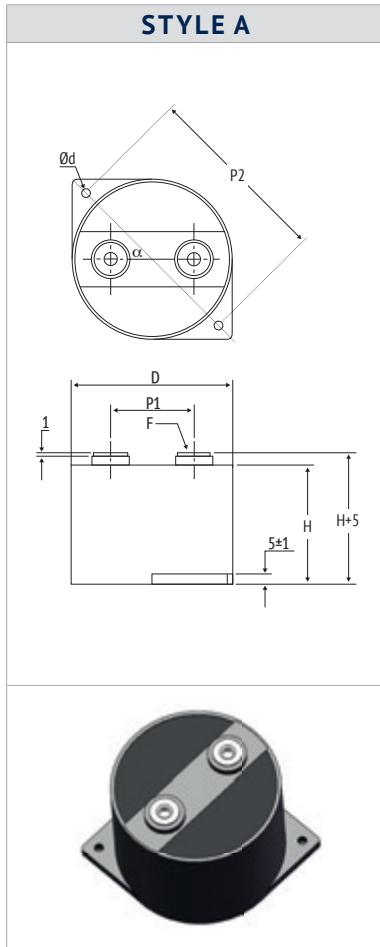


CURRENT DERATING



DC-LINK

■ DIMENSIONS



in mm

ΦD±1 (mm)	H±1 (mm)	P1 ± 0.5 (mm)	P2 ± 0.5 (mm)	P3 ± 0.5 (mm)	Terminal (mm)		Φd ± 0.5 (mm)
					F Female	M Male	
85	51	45	101	-	M6*10 [order code 0]	M8*20 [order code 3]	5,5
84,5/85	65	45	101	-	M6*10 [order code 0]	M8*20 [order code 3]	5,5
95	83	38	-	38	M6*10 [order code 0]	-	-

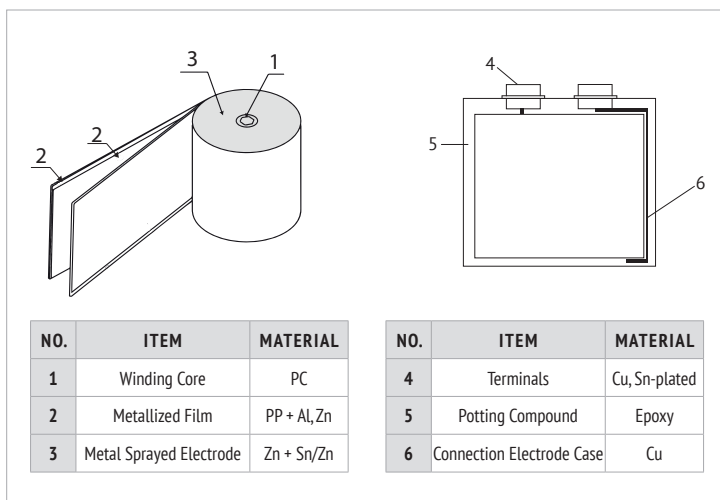
α = 45°C +/- 2°

Max. torque for terminals: 5 Nm (M6), 8 Nm (M8)

Max. torque for mounting screws: 3,5 Nm

Other Terminals on request.

■ INTERNAL CONSTRUCTION



■ MARKING

CBB 136
200µF ±10%
U_R = 600VDC
U_{TC} = 3000V 50/60 HZ
-40~+85°C IEC61071
Discharge before handling
E304F12104

BRAND	
SERIES DESIGNATION	
CAPACITANCE AND TOLERANCE	
U _R RATED VOLTAGE	
U _{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY	
TEMPERATURE RANGE, REFERENCE STANDARD	
SAFETY WARNING	
DATE CODE	

DC-LINK

ORDER CODE

FC	C	3A	DP	117	K	K	065	0	4	0	A	1E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code Examples (μF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminal style	Terminal pitch P ₁ (mm)	Fixed Hole	Style	For internal use
Film Cap. = FC	cylindrical = C	600 2S 800 2K 1000 3A 1200 3B	CBB 136 = DP	50 506 75 756 80 806 110 117 120 127 200 207 220 227 280 287	±5% J ±10% K	84,5 J 85 K 95 W	51 051 65 065 83 083	Female M6*10 0 Male M8*20 3	45 4 38 3	with 0 without 1	Style A A Style B B Style C C	

RATINGS

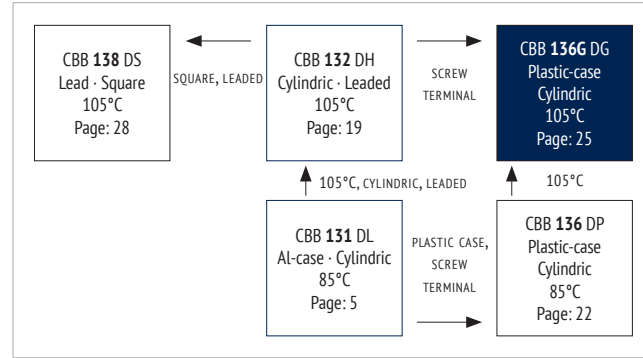
U _R (V _{DC})	C _R (μF)	I _{max} 70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)	̄I ⁽¹⁾ (A)	R _s 20°C, 1kHz (mΩ)	R _m ⁽²⁾ (K/W)	L _s 20°C (nH)	D ±1,0 (mm)	H ±1,0 (mm)	ORDER CODE *# to be defined, see ordering code table
600 2S	200	39	56	69	79	4000	1,2	5,3	≤20	85	51	FCC2SDP207#K051#40#1E3
	280	37	53	65	76	3700	1,4	5,0	≤30	84,5	65	FCC2SDP287#J065#40#1E3
	280	37	53	65	76	3700	1,4	5,0	≤30	85	65	FCC2SDP287#K065#40#1E3
	645	47	68	83	96	4000	0,84	5,2	≤25	95	83	FCC2SDP657#W083#31C1E3
800 2K	120	39	56	69	79	3000	1,2	5,3	≤20	85	51	FCC2KDP127#K051#40#1E3
	220	37	53	65	76	3000	1,4	5,0	≤30	84,5	65	FCC2KDP227#J065#40#1E3
	220	37	53	65	76	3000	1,4	5,0	≤30	85	65	FCC2KDP227#K065#40#1E3
1000 3A	75	36	52	64	73	2400	1,4	5,3	≤20	85	51	FCC3ADP756#K051#40#1E3
	110	34	49	59	69	2300	1,7	5,0	≤30	84,5	65	FCC3ADP117#J065#40#1E3
	110	34	49	59	69	2300	1,7	5,0	≤30	85	65	FCC3ADP117#K065#40#1E3
1200 3B	60	30	43	53	61	1250	2,0	5,3	≤20	85	51	FCC3BDP606#K051#40#1E3
	90	30	43	52	60	2000	2,2	5,0	≤30	85	65	FCC3BDP906#K051#40#1E3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

FEATURES

- DC-Link
- 105°C Type
- High ripple current capability
- Self-healing
- Long lifetime
- Plastic case

OVERVIEW



PRODUCT



APPLICATIONS

- High power frequency converters
- Motion control, welding equipment, elevators
- Photovoltaic and wind inverters

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\theta_{\text{hotspot}} \leq 105 \text{ °C}$) $\theta_{\text{hotspot}} = 85\text{-}105\text{ °C}$: See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	600 ~ 1.000 V_{DC}
Capacitance Range	55 ~ 220 μF
Capacitance Tolerance	$\pm 10 \%$ (K), $\pm 5 \%$ (J)
Voltage between Terminals U_{TT}	$1,5 * U_{\text{RDC}}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{\text{AC}}$ (20°C, 50 Hz, 10s)
Max. Overvoltage	$1,1 * U_{\text{RDC}}$ (30 % of time under load) $1,15 * U_{\text{RDC}}$ (30 min. per day) $1,2 * U_{\text{RDC}}$ (5 min. per day) $1,3 * U_{\text{RDC}}$ (1 min. per day) $1,5 * U_{\text{RDC}}$ (max. 30 ms, 100ms per day)
Insulation Resistance R_i *°C	$\geq 5.000 \text{ M}\Omega * \mu\text{F}$ (20°C, 100 V_{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_0$	$\leq 2 * 10^{-4}$ (20°C, 100 Hz)
Life Time Expectancy	$\geq 100.000 \text{ h}$, failure rate $\leq 50 \text{ FIT}$ ($\theta_{\text{hotspot}} \leq 70\text{ °C}$, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant.

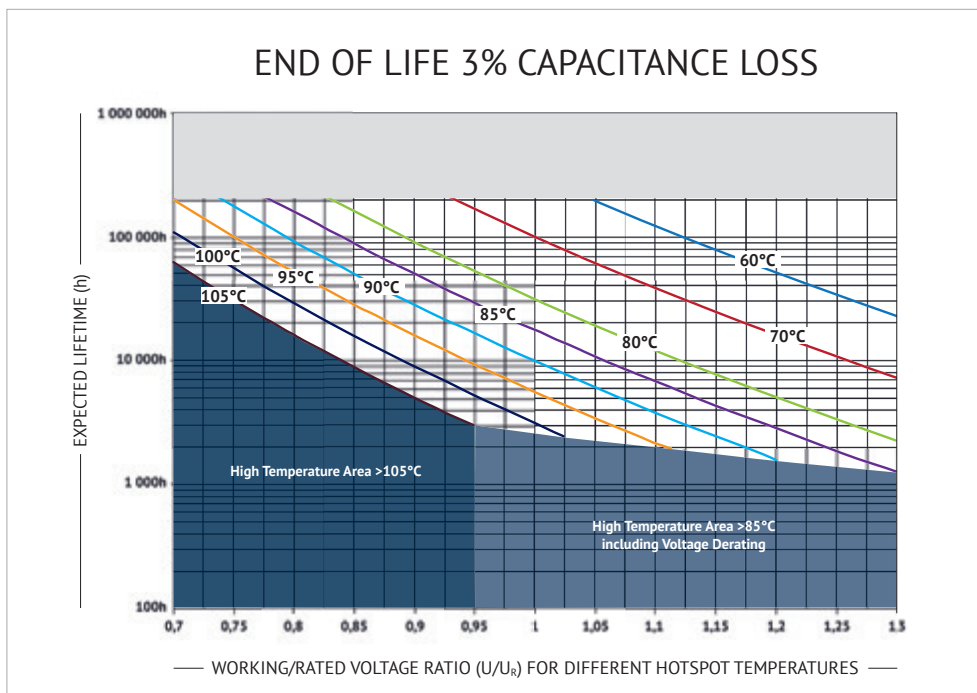
The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

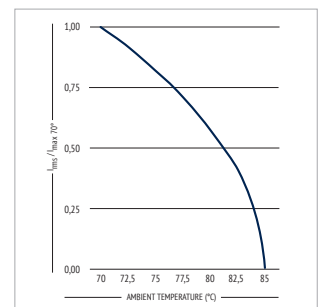
UL94-V0:

Plastic & Compound Mass

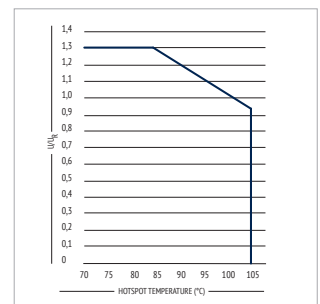
LIFETIME



CURRENT DERATING

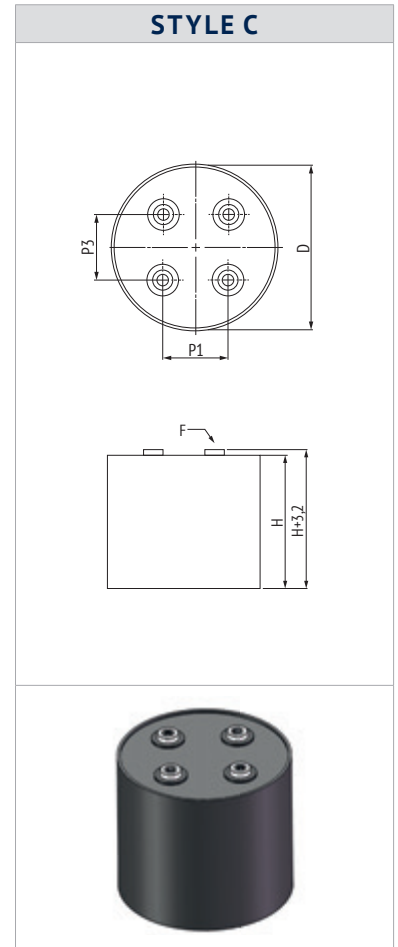
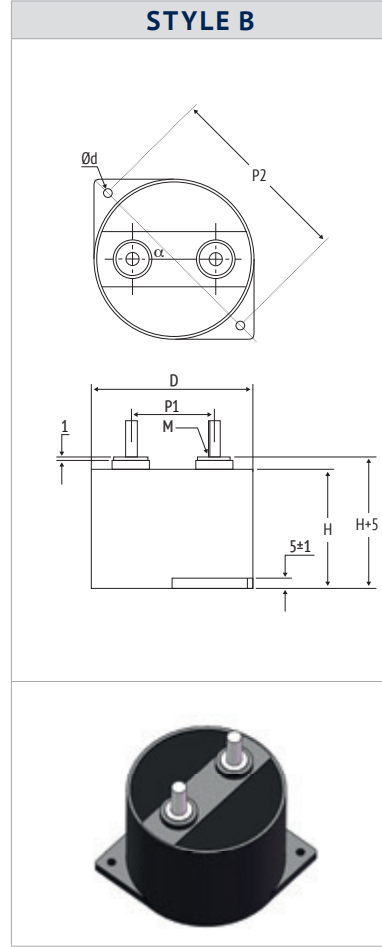
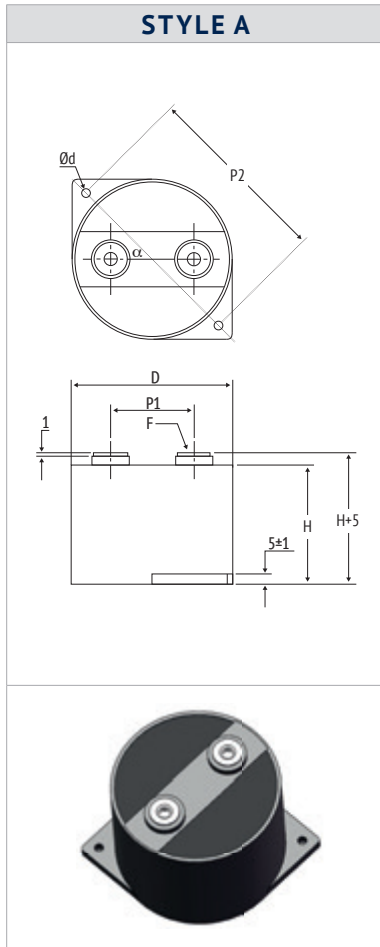


VOLTAGE DERATING



DC-LINK

DIMENSIONS



in mm

ΦD±1 (mm)	H±1 (mm)	P1 ± 0.5 (mm)	P2 ± 0.5 (mm)	P3 ± 0.5 (mm)	Terminal (mm)		Φd ± 0.5 (mm)
					F Female	M Male	
85	51	45	101	-	M6*10 [order code 0]	M8*20 [order code 3]	5,5
84,5/85	65	45	101	-	M6*10 [order code 0]	M8*20 [order code 3]	5,5
95	83	38	-	38	M6*10 [order code 0]	-	-

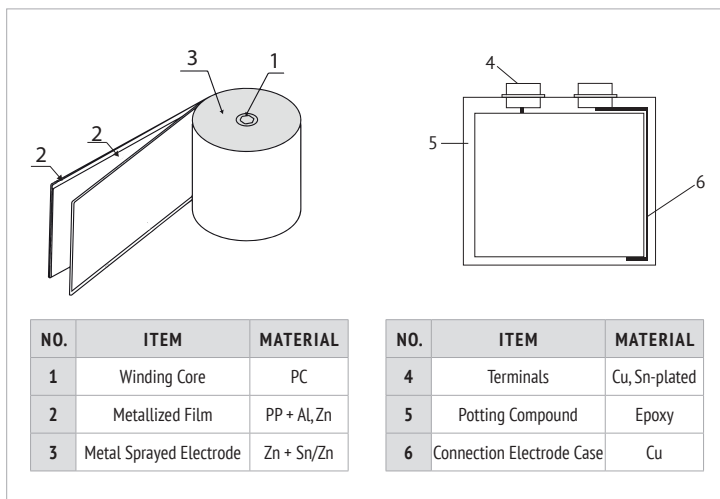
α = 45°C +/- 2°

Max. torque for terminals: 5 Nm (M6), 8 Nm (M8)

Max. torque for mounting screws: 3,5 Nm

Other Terminals on request.

INTERNAL CONSTRUCTION



MARKING

BRAND

CBB 136G
200µF ±10%
U_R = 600VDC
U_{TC} = 3000V 50/60 HZ
-40~+85°C IEC61071

Discharge before handling

E05F13104

SERIES DESIGNATION

CAPACITANCE AND TOLERANCE

U_R RATED VOLTAGE

U_{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY

TEMPERATURE RANGE, REFERENCE STANDARD

SAFETY WARNING

DATE CODE

ORDER CODE

FC	C	3A	DG	117	K	K	065	0	4	0	A	1E3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code Examples (μF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminal style	Terminal pitch P ₁ (mm)	Fixed hole	Style	For internal use
Film Cap. = FC	cylindrical = C	600 2S 800 2K 900 R2 1000 3A	CBB 136G = DG	50 506 75 756 80 806 110 117 120 127 200 207 220 227 280 287	±5% J ±10% K	84,5 J 85 K 95 W	51 051 65 065	Female M6*10 0 Male M8*20 3	45 4 38 3	with 0 without 1	Style A A Style B B Style C C	

RATINGS

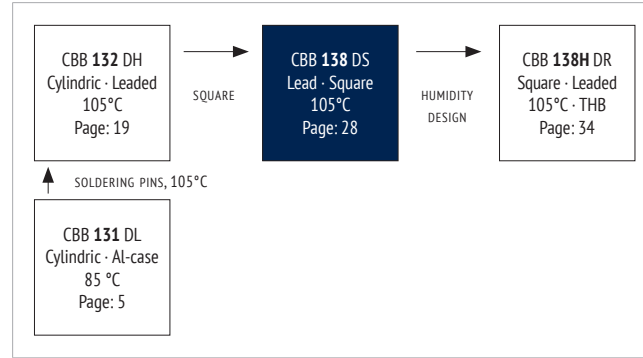
U _R	C _R	I _{max}				İ ⁽¹⁾	R _s	R _{th} ⁽²⁾	L _s	D	H	ORDER CODE
≤85°C		85°C, 1kHz	70°C, 1kHz	60°C, 1kHz	≤50°C, 1kHz		20°C, 1kHz		20°C	±1,0	±1,0	"#" to be defined, see ordering code table
(V _{DC})	(μF)	(A)	(A)	(A)	(A)	(A)	(mΩ)	(K/W)	(nH)	(mm)	(mm)	
600 2S	140	50	71	82	92	2800	1,1	5,3	≤20	85	51	FCC2SDG147#K051#4##1E3
	220	46	65	75	84	2860	1,4	5,0	≤30	84,5	65	FCC2SDG227#J065#4##1E3
	220	46	65	75	84	2860	1,4	5,0	≤30	85	65	FCC2SDG227#K065#4##1E3
800 2K	90	46	65	76	85	2100	1,3	5,3	≤20	85	51	FCC2KDG906#K051#4##1E3
	140	44	63	73	81	2375	1,5	5,0	≤30	84,5	65	FCC2KDG147#J065#4##1E3
	140	44	63	73	81	2375	1,5	5,0	≤30	85	65	FCC2KDG147#K065#4##1E3
900 R2	150	59	84	97	100	3000	0,8	5,3	≤20	85	51	FCCR2DG157#K051#4##1E3
1000 3A	55	43	61	70	79	1760	1,5	5,3	≤20	85	51	FCC3ADG556#K051#4##1E3
	85	42	59	68	76	1785	1,7	5,0	≤30	84,5	65	FCC3ADG856#J065#4##1E3
	85	42	59	68	76	1785	1,7	5,0	≤30	85	65	FCC3ADG856#K065#4##1E3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

FEATURES

- DC-Link
- Design for DC Link Application
- Metal sprayed contacts for low ESR
- Self-healing

OVERVIEW



PRODUCT



APPLICATIONS

- Frequency inverter and intermediate circuits
- Industry high-end power supplies

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\Theta_{\text{hotspot}} \leq 105$ °C) $\Theta_{\text{hotspot}} = 85$ -105°C: See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	450 ~ 1.200 V _{DC}
Capacitance Range	1 ~ 170 μF
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 \cdot U_{\text{RDC}}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	≥ 3.000 V _{AC} (20°C, 50 Hz, 10s)
Dielectric Dissipation Factor $\tan \delta_o$	$\leq 2 \cdot 10^{-4}$ (20 °C, 1 kHz)
Insulator Resistance R_i , °C	≥ 5.000 M $\Omega \cdot \mu\text{F}$ (20 °C, 100 V _{DC} , 1 min)
Max. Overvoltage	$1,1 \cdot U_{\text{RDC}}$ (30 % of time under load) $1,15 \cdot U_{\text{RDC}}$ (30 min. per day) $1,2 \cdot U_{\text{RDC}}$ (5 min. per day) $1,3 \cdot U_{\text{RDC}}$ (1 min. per day) $1,5 \cdot U_{\text{RDC}}$ (max. 30 ms, 100ms per day)
Life Time Expectancy	≥ 100.000 h, failure rate ≤ 50 FIT (70°C)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

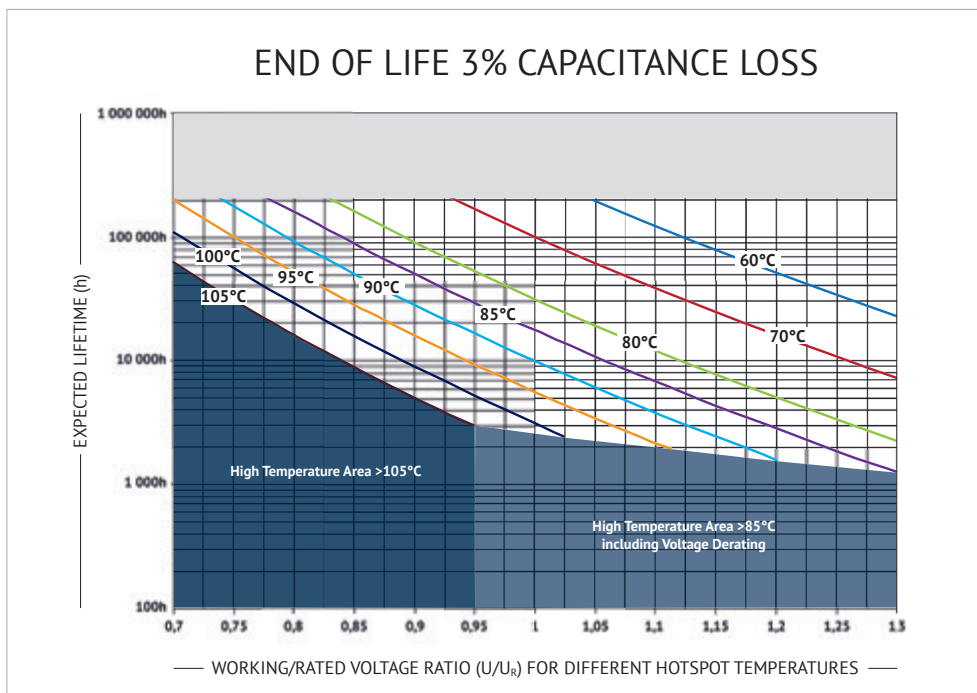
The products are RoHS, WEEE and REAcH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

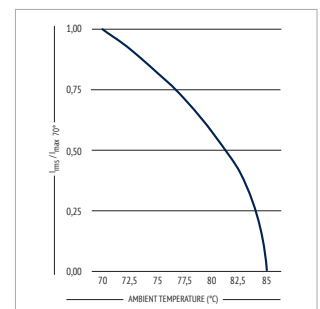
APPROVALS

- UL94-V0:**
- Plastic & Compound Mass
- UL810:**
- CZDS2.E227010 (Construction)

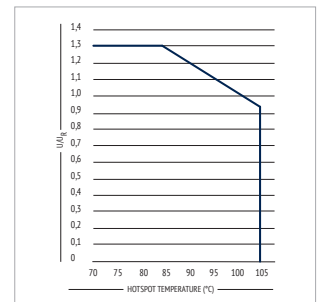
LIFETIME



CURRENT DERATING

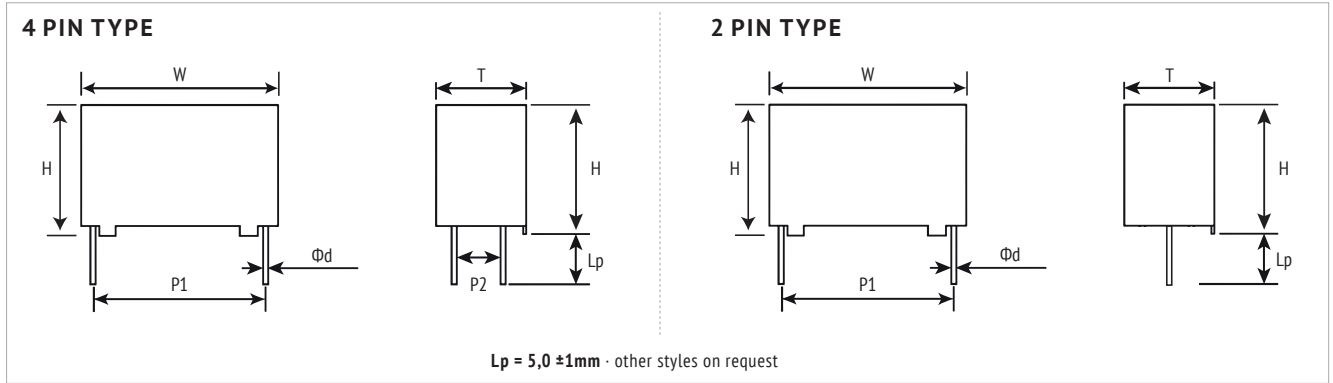


VOLTAGE DERATING

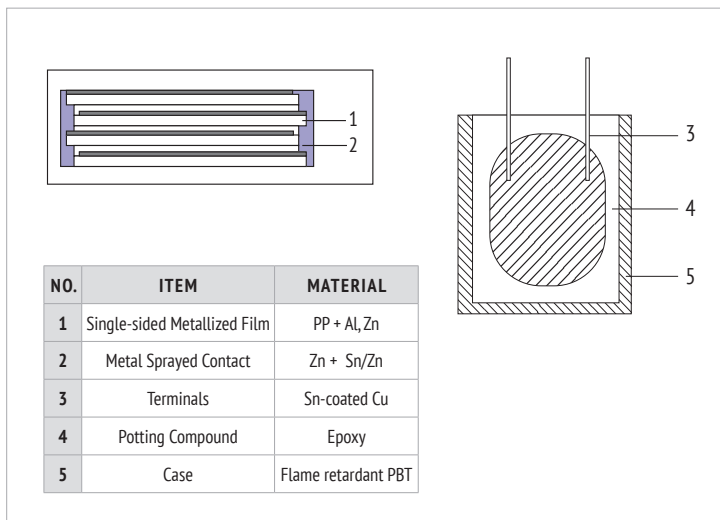


DC-LINK

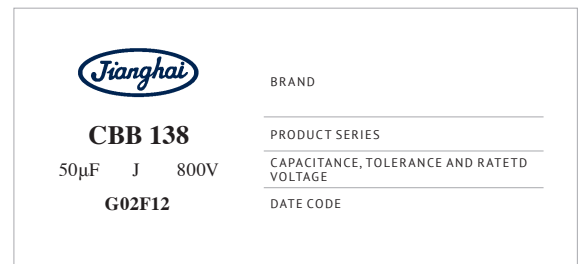
DIMENSIONS



INTERNAL CONSTRUCTION



MARKING



ORDER CODE

FC	S	3B	DS	105	K	A	FK	37	20	C	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (µF)	Capacitance tolerance	Pin Style (mm)	Dimension Code WxHxT (mm)	Pitch P ₁ (mm)	Pitch P ₂ (mm)	Leadwire Diameter Ød	For internal use
Film Cap. = FC	Square box = S	450 2W 500 2H 550 2Y 600 2S 700 2Q 800 2K 900 R2 1000 3A 1100 A3 1200 3B 1300 03 1500 C3 1700 F3	CBB 138 = DS	0,68 684 0,82 824 1,0 105 1,2 125 2,0 205 5,0 505 10 106 20 206	±5% J ±10% K	4 Pin Lp = 8mm K 4 Pin Lp = 5mm A 4 Pin Lp = 4,5mm L 4 Pin Lp = 4mm S 4 Pin Lp = 3,5mm J 2 Pin long leads (~ 20mm) C 2 Pin Lp = 5mm B 2 Pin Lp = 4,5mm T 2 Pin Lp = 4,0mm M 2 Pin Lp = 3,5mm U 2 Pin Lp = 3,2mm V	32 x 18 x 9 I1 32 x 20 x 11 I4 32 x 22 x 13 I7 32 x 28 x 14 IC 32 x 28 x 18 ID 32 x 33 x 18 IF 32 x 37 x 22 II 32 x 24,5 x 15 IJ 42,5 x 37 x 28 F1 42,5 x 40 x 20 F2 42,5 x 32 x 19 F5 42,5 x 44 x 24 F9 42,5 x 45 x 30 FF 42,5 x 50 x 35 FK 42,5 x 18 x 24 FL 42,5 x 37 x 22 FQ 42,5 x 33,5 x 22 FT 57,5 x 60 x 35 H6 57,5 x 65 x 45 H7 57,5 x 70 x 35 H8 57,5 x 53 x 50 HA 57,5 x 45 x 30 HH 57,5 x 50 x 35 HL 57,5 x 55 x 45 HS 57,5 x 80 x 35 K4 57,5 x 65 x 35 KA	22,5 22 27,5 27 37,5 37 52,5 52	20,3 20 10,2 10 - 00	0,6 A 0,8 B 1,0 C 1,2 D 0,5 E	

RATINGS

U _k ≤85°C (V _{DC})	C _r (μF)	I _{max}			İ ⁽¹⁾ (A)	R _s 20°C 10kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	dV/dt 20°C (V/μs)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P ₁ ±0,5 (mm)	P ₂ ±0,5 (mm)	Ød ±0,05 (mm)	ORDER CODE * to be defined, see ordering code table
		70°C 10kHz (A)	60°C 10kHz (A)	≤50°C 10kHz (A)											
450 2W	1	2,5	3,5	4,3	50	54,0	29,6	50	32	18	9	27,5	\	0,8	FCS2WDS105##I12700BE3
	2	3,0	4,2	5,1	100	34,0	32,7	50	32	18	9	27,5	\	0,8	FCS2WDS205##I12700BE3
	3	4,0	5,6	6,9	150	23,0	27,2	50	32	20	11	27,5	\	0,8	FCS2WDS305##I42700BE3
	4	4,0	5,6	6,9	200	20,5	30,5	50	32	20	11	27,5	\	0,8	FCS2WDS405##I42700BE3
	5	5,0	7,0	8,6	250	15,0	26,7	50	32	20	11	27,5	\	0,8	FCS2WDS505##I42700BE3
	5	5,5	7,7	9,5	250	14,0	23,6	50	32	22	13	27,5	\	0,8	FCS2WDS505##I72700BE3
	10	7,5	10,6	12,9	500	8,5	20,9	50	32	28	14	27,5	\	0,8	FCS2WDS106##IC2700BE3
	10	9,0	12,0	12,0	500	8,0	15,4	50	32	28	18	27,5	\	0,8	FCS2WDS106##ID2700BE3
	12	10,0	12,0	12,0	600	7,0	14,3	50	32	33	18	27,5	\	0,8	FCS2WDS126##IF2700BE3
	15	11,5	12,0	12,0	750	6,0	12,6	50	32	37	22	27,5	\	0,8	FCS2WDS156##II2700BE3
	15	9,5	13,4	15,0	450	8,5	13	30	42,5	18	24	37,5	\	1	FCS2WDS156##FL3700CE3
	18	11,0	12,0	12,0	900	6,0	13,8	50	32	37	22	27,5	\	0,8	FCS2WDS186##II2700BE3
	20	12,0	12,0	12,0	1000	5,0	12,8	50	32	37	22	27,5	\	0,8	FCS2WDS206##II2700BE3
	22	12,0	12,0	12,0	1100	5,0	12,8	50	32	37	22	27,5	\	0,8	FCS2WDS226##II2700BE3
	25	12,5	17,7	21,6	750	5,5	11,6	30	42,5	37	22	37,5	10,2	1	FCS2WDS256##FQ3710CE3
	30	12,0	16,9	20,7	900	6,0	11,6	30	42,5	40	20	37,5	10,2	1	FCS2WDS306##F23710CE3
	40	14,0	19,7	24,2	1200	5,5	9,3	30	42,5	37	28	37,5	10,2	1	FCS2WDS406##F13710CE3
	40	15,0	21,2	26,0	1200	5,2	8,5	30	42,5	44	24	37,5	10,2	1	FCS2WDS406##F93710CE3
	50	15,0	21,2	26,0	1500	4,0	11,1	30	42,5	45	30	37,5	20,3	1,2	FCS2WDS506##FF3720DE3
	55	15,5	21,9	26,9	1650	5,0	8,3	30	57,5	45	30	37,5	20,3	1,2	FCS2WDS556##HH3720DE3
60	16,5	23,2	28,5	1800	4,5	8,2	30	57,5	45	30	37,5	20,3	1,2	FCS2WDS606##HH3720DE3	
60	16,5	23,3	28,5	1800	4,0	9,2	30	42,5	45	30	37,5	20,3	1,2	FCS2WDS606##FF3720DE3	
80	16,0	22,5	27,6	1200	4,0	9,8	15	57,5	45	30	52,5	20,3	1,2	FCS2WDS806##HH5220DE3	
100	18,0	25,5	31,2	1500	3,8	8,1	15	57,5	50	35	52,5	20,3	1,2	FCS2WDS107##HL5220DE3	
130	22,0	31,1	36,0	1950	3,5	5,9	15	57,5	60	35	52,5	20,3	1,2	FCS2WDS137##H65220DE3	
140	24,0	33,9	36,0	2100	3,4	5,1	15	57,5	65	35	52,5	20,3	1,2	FCS2WDS147##KA5220DE3	
150	26,0	36,0	36,0	2250	3,2	4,6	15	57,5	70	35	52,5	20,3	1,2	FCS2WDS157##H85220DE3	
160	28,0	36,0	36,0	2400	3,1	4,1	15	57,5	80	35	52,5	20,3	1,2	FCS2WDS167##K45220DE3	
170	30,0	36,0	36,0	2550	3,0	3,7	15	57,5	80	35	52,5	20,3	1,2	FCS2WDS177##K45220DE3	
550 2Y	3	4,0	5,6	6,9	150	28,0	22,3	50	32	20	11	27,5	\	0,8	FCS2YDS305##I42700BE3
	5	6,0	8,4	10,4	250	14,0	19,8	50	32	22	13	27,5	\	0,8	FCS2YDS505##I72700BE3
	8	8,5	12,0	12,0	400	12,5	11,1	50	32	28	14	27,5	\	0,8	FCS2YDS805##IC2700BE3
	10	10,0	12,0	12,0	500	8,0	12,5	50	32	33	18	27,5	\	0,8	FCS2YDS106##IF2700BE3
	15	12,0	12,0	12,0	750	6,5	10,7	50	32	37	22	27,5	\	0,8	FCS2YDS156##II2700BE3
	15	13,0	18,3	22,4	750	5,5	10,8	50	32	37	22	27,5	10,2	0,8	FCS2YDS156##II2710BE3
	20	12,5	17,7	21,7	600	6,5	9,8	30	42,5	40	20	37,5	10,2	1	FCS2YDS206##F23710CE3
	22	13,5	19,1	23,4	660	6,5	8,4	30	42,5	40	20	37,5	10,2	1	FCS2YDS226##F23710CE3
	25	14,5	20,5	25,1	750	6,5	7,3	30	42,5	40	20	37,5	10,2	1	FCS2YDS256##F23710CE3
	30	16,0	22,6	27,7	900	6,0	6,5	30	42,5	44	24	37,5	10,2	1	FCS2YDS306##F93710CE3
	35	18,0	25,5	31,3	1050	6,0	5,1	30	42,5	45	30	37,5	20,3	1,2	FCS2YDS356##FF3720DE3
	40	18,0	25,4	31,2	1200	5,5	5,6	30	42,5	45	30	37,5	20,3	1,2	FCS2YDS406##FF3720DE3
	50	20,0	28,2	34,6	1500	5,0	5	30	42,5	50	35	37,5	20,3	1,2	FCS2YDS506##FK3720DE3
	60	18,0	25,5	31,2	900	4,8	6,4	15	57,5	45	30	37,5	20,3	1,2	FCS2YDS606##HH3720DE3
	75	20,0	28,2	34,6	1125	5,0	5	15	57,5	50	35	52,5	20,3	1,2	FCS2YDS756##HL5220DE3
	100	24,0	33,7	36,0	1500	4,5	3,9	15	57,5	55	45	52,5	20,3	1,2	FCS2YDS107##HS5220DE3
	110	26,0	36,0	36,0	1650	4,0	3,7	15	57,5	55	50	52,5	20,3	1,2	FCS2YDS117##HA5220DE3
	130	23,0	32,4	36,0	1950	3,4	5,6	15	57,5	60	35	52,5	20,3	1,2	FCS2YDS137##H65220DE3
	140	25,0	35,5	36,0	2100	3,3	4,8	15	57,5	65	35	52,5	20,3	1,2	FCS2YDS147##KA5220DE3
	150	27,0	36,0	36,0	2250	3,1	4,4	15	57,5	70	35	52,5	20,3	1,2	FCS2YDS157##H85220DE3
160	29,0	36,0	36,0	2400	3,0	4	15	57,5	80	35	52,5	20,3	1,2	FCS2YDS167##K45220DE3	
170	32,0	36,0	36,0	2550	2,8	3,5	15	57,5	80	35	52,5	20,3	1,2	FCS2YDS177##K45220DE3	
600 2S	3	4,0	5,6	6,9	150	28,0	22,3	50	32	20	11	27,5	\	0,8	FCS2SDS305##I42700BE3
	4	5,0	7,0	8,6	200	26,0	15,4	50	32	20	11	27,5	\	0,8	FCS2SDS405##I42700BE3
	5	6,0	8,4	10,3	250	14,5	19,2	50	32	28	14	27,5	\	0,8	FCS2SDS505##IC2700BE3
	8	7,5	10,6	12,0	400	12,0	14,8	50	32	28	14	27,5	\	0,8	FCS2SDS805##IC2700BE3
	10	8,5	12,0	12,0	500	7,5	18,5	50	32	33	18	27,5	\	0,8	FCS2SDS106##IF2700BE3
	12	9,5	12,0	12,0	600	7,5	14,8	50	32	33	18	27,5	\	0,8	FCS2SDS126##IF2700BE3
	12	8,0	11,3	13,8	360	9,5	16,4	30	42,5	18	24	37,5	\	1	FCS2SDS126##FL3700CE3
	15	10,5	12,0	12,0	750	7,5	12,1	50	32	37	22	27,5	\	0,8	FCS2SDS156##II2700BE3
	15	12,0	15,0	15,0	750	6,0	11,6	50	42,5	18	24	37,5	\	1	FCS2SDS156##FL3700CE3
	20	11,0	15,5	19,0	600	6,0	13,8	30	42,5	40	20	37,5	10,2	1	FCS2SDS206##F23710CE3
	30	13,0	18,3	22,4	900	5,5	10,8	30	42,5	37	28	37,5	10,2	1	FCS2SDS306##F13710CE3
	35	16,5	23,4	28,6	1050	5,0	7,3	30	42,5	44	24	37,5	10,2	1	FCS2SDS356##F93710CE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)



DC-LINK

U _a ≤85°C (V _{oc})	C _r (μF)	70°C	60°C	≤50°C	İ ⁽¹⁾ (A)	R _s	R _{th} ⁽²⁾	dV/dt	W	H	T	P ₁	P ₂	∅d	ORDER CODE *# to be defined, see ordering code table
		10kHz	10kHz	10kHz		20°C	(K/W)	20°C	±1,0	±1,0	±1,0	±0,5	±0,5	±0,05	
800 2K	40	14,0	19,8	24,2	600	6,0	8,5	15	57,5	45	30	52,5	20,3	1,2	FCS2KDS406##HH5220DE3
	45	15,5	21,8	26,7	675	5,5	7,6	15	57,5	45	30	52,5	20,3	1,2	FCS2KDS456##HH5220DE3
	47	17,5	24,8	30,3	564	5,0	6,5	12	57,5	50	35	52,5	20,3	1,2	FCS2KDS476##HL5220DE3
	50	16,0	22,6	27,7	600	5,0	7,8	12	57,5	50	35	52,5	20,3	1,2	FCS2KDS506##HL5220DE3
	55	17,0	24,0	29,4	660	4,6	7,5	12	57,5	50	35	52,5	20,3	1,2	FCS2KDS556##HL5220DE3
	65	19,0	26,9	32,9	780	4,0	6,9	12	57,5	60	35	52,5	20,3	1,2	FCS2KDS656##H65220DE3
	65	20,0	28,1	34,5	975	4,0	6,3	15	57,5	55	45	52,5	20,3	1,2	FCS2KDS656##HS5220DE3
	70	20,0	28,2	34,5	1050	3,8	6,6	15	57,5	55	45	52,5	20,3	1,2	FCS2KDS706##HS5220DE3
	70	20,0	28,2	34,5	1050	3,8	6,6	15	57,5	60	35	52,5	20,3	1,2	FCS2KDS706##H65220DE3
	75	22,0	31,2	36,0	1125	3,8	5,4	15	57,5	55	45	52,5	20,3	1,2	FCS2KDS756##HS5220DE3
	75	22,0	31,2	36,0	1125	3,8	5,4	15	57,5	65	35	52,5	20,3	1,2	FCS2KDS756##KA5220DE3
	80	23,0	32,5	36,0	1200	3,5	5,4	15	57,5	53	50	52,5	20,3	1,2	FCS2KDS806##HA5220DE3
	80	23,0	32,5	36,0	1200	3,5	5,4	15	57,5	70	35	52,5	20,3	1,2	FCS2KDS806##H85220DE3
	90	25,0	35,5	36,0	1350	3,3	4,8	15	57,5	53	50	52,5	20,3	1,2	FCS2KDS906##HA5220DE3
90	25,0	35,5	36,0	1350	3,3	4,8	15	57,5	80	35	52,5	20,3	1,2	FCS2KDS906##K45220DE3	
100	28,0	36,0	36,0	1500	3,2	4	15	57,5	65	45	52,5	20,3	1,2	FCS2KDS107##H75220DE3	

900 R2	1	2,0	2,8	3,4	60	63,0	39,7	60	32	18	9	27,5	\	0,8	FCSR2DS105##I12700BE3
	2	3,0	4,2	5,1	120	25,0	44,4	60	32	20	11	27,5	\	0,8	FCSR2DS205##I42700BE3
	3	5,0	7,0	8,6	180	18,5	21,6	60	32	22	13	27,5	\	0,8	FCSR2DS305##I72700BE3
	3,3	5,0	7,0	8,6	198	18,5	21,6	60	32	24,5	15	27,5	\	0,8	FCSR2DS335##I12700BE3
	5	7,0	9,9	12,0	300	12,5	16,3	60	32	28	18	27,5	\	0,8	FCSR2DS505##I12700BE3
	6	8,0	11,3	12,0	360	11,0	14,2	60	32	33	18	27,5	\	0,8	FCSR2DS605##I12700BE3
	8	10,5	12,0	12,0	480	10,0	9,1	60	32	37	22	27,5	\	0,8	FCSR2DS805##I12700BE3
	10	12,0	12,0	12,0	600	10,0	6,9	60	32	37	22	27,5	\	0,8	FCSR2DS106##I12700BE3
	10	8,5	12,0	14,7	350	12,0	11,5	35	42,5	40	20	37,5	\	1	FCSR2DS106##F23700CE3
	10	9,5	13,4	16,4	350	11,5	9,6	35	42,5	40	20	37,5	10,2	1	FCSR2DS106##F23710CE3
	15	10,5	14,8	15,0	525	8,0	11,3	35	42,5	44	24	37,5	\	1	FCSR2DS156##F93700CE3
	18	10,5	14,8	15,0	630	8,0	11,3	35	42,5	44	24	37,5	\	1	FCSR2DS186##F93700CE3
	18	12,0	16,9	20,7	630	7,5	9,3	35	42,5	44	24	37,5	10,2	1	FCSR2DS186##F93710CE3
	20	14,0	15,0	15,0	700	6,0	8,5	35	42,5	45	30	37,5	\	1	FCSR2DS206##FF3700CE3
	20	15,0	21,1	25,9	700	5,5	8,1	35	42,5	45	30	37,5	20,3	1,2	FCSR2DS206##FF3720DE3
	25	17,0	24,0	29,4	875	5,5	6,3	35	42,5	45	30	37,5	20,3	1,2	FCSR2DS256##FF3720DE3
	30	19,0	26,9	33,0	1050	5,0	5,5	35	42,5	50	35	37,5	20,3	1,2	FCSR2DS306##FK3720DE3
	30	15,0	21,1	25,9	450	5,5	8,1	15	57,5	45	30	52,5	20,3	1,2	FCSR2DS306##HH5220DE3
	35	15,5	21,8	26,7	525	5,5	7,6	15	57,5	50	35	52,5	20,3	1,2	FCSR2DS356##HL5220DE3
	40	16,0	22,6	27,7	600	6,5	6	15	57,5	50	35	52,5	20,3	1,2	FCSR2DS406##HL5220DE3
	50	18,0	25,4	31,1	750	3,6	8,6	15	57,5	50	35	52,5	20,3	1,2	FCSR2DS506##HL5220DE3
	55	19,0	26,8	32,9	825	3,5	7,9	15	57,5	60	35	52,5	20,3	1,2	FCSR2DS556##H65220DE3
	55	20,0	28,1	34,5	825	3,4	7,4	15	57,5	55	45	52,5	20,3	1,2	FCSR2DS556##HS5220DE3
	60	20,0	28,1	34,5	900	3,4	7,4	15	57,5	55	45	52,5	20,3	1,2	FCSR2DS606##HS5220DE3
	60	20,0	28,1	34,5	900	3,4	7,4	15	57,5	65	35	52,5	20,3	1,2	FCSR2DS606##KA5220DE3
	65	22,0	31,0	36,0	975	3,3	6,3	15	57,5	70	35	52,5	20,3	1,2	FCSR2DS656##H85220DE3
	70	24,0	34,0	36,0	1050	3,2	5,4	15	57,5	53	50	52,5	20,3	1,2	FCSR2DS706##HA5220DE3
	70	24,0	34,0	36,0	1050	3,2	5,4	15	57,5	80	35	52,5	20,3	1,2	FCSR2DS706##K45220DE3
	80	25,0	35,3	36,0	1200	3,2	5	15	57,5	65	45	52,5	20,3	1,2	FCSR2DS806##H75220DE3

1000 3A	1	2,5	3,5	4,3	70	45,0	35,6	70	32	20	11	27,5	\	0,8	FCS3ADS105##I42700BE3
	2	3,5	4,9	6,0	120	30,0	27,2	60	32	22	13	27,5	\	0,8	FCS3ADS205##I72700BE3
	3	5,0	7,0	8,6	180	25,0	16	60	32	24,5	15	27,5	\	0,8	FCS3ADS305##I12700BE3
	5	8,0	11,2	12,0	300	14,0	11,2	60	32	33	18	27,5	\	0,8	FCS3ADS505##I12700BE3
	8	10,0	12,0	12,0	480	12,0	8,3	60	32	37	22	27,5	\	0,8	FCS3ADS805##I12700BE3
	10	8,5	12,0	14,7	350	12,0	11,5	35	42,5	40	20	37,5	\	1	FCS3ADS106##F23700CE3
	10	9,5	13,4	16,4	350	11,5	9,6	35	42,5	40	20	37,5	10,2	1	FCS3ADS106##F23710CE3
	12	10,5	14,8	18,1	420	9,0	10,1	35	42,5	44	24	37,5	10,2	1	FCS3ADS126##F93710CE3
	15	10,5	14,8	15,0	525	8,0	11,3	35	42,5	44	24	37,5	\	1	FCS3ADS156##F93700CE3
	15	12,0	16,9	20,7	525	7,5	9,3	35	42,5	44	24	37,5	10,2	1	FCS3ADS156##F93710CE3
	15	14,0	19,8	24,2	525	7,5	6,8	35	42,5	45	30	37,5	20,3	1,2	FCS3ADS156##FF3720DE3
	20	15,0	21,2	26,0	700	6,5	6,8	35	42,5	45	30	37,5	20,3	1,2	FCS3ADS206##FF3720DE3
	25	18,0	25,4	31,2	875	5,5	5,6	35	42,5	50	35	37,5	20,3	1,2	FCS3ADS256##FK3720DE3
	30	15,0	21,1	25,9	450	5,5	8,1	15	57,5	45	30	52,5	20,3	1,2	FCS3ADS306##HH5220DE3
	35	16,0	22,6	27,7	525	5,5	7,1	15	57,5	50	35	52,5	20,3	1,2	FCS3ADS356##HL5220DE3
	40	16,0	22,6	27,7	600	5,0	7,8	15	57,5	50	35	52,5	20,3	1,2	FCS3ADS406##HL5220DE3
	40	17,0	24,0	29,4	600	5,0	6,9	15	57,5	60	35	52,5	20,3	1,2	FCS3ADS406##H65220DE3
	50	19,0	26,7	32,7	750	4,5	6,2	15	57,5	55	45	52,5	20,3	1,2	FCS3ADS506##HS5220DE3
	50	19,0	26,7	32,7	750	4,5	6,2	15	57,5	65	35	52,5	20,3	1,2	FCS3ADS506##KA5220DE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)



U _r ≤85°C (V _{oc})	C _r (μF)	I _{max}			Ī ⁽¹⁾ (A)	R _s	R _{th} ⁽²⁾	dV/dt	W	H	T	P ₁	P ₂	∅d	ORDER CODE *# to be defined, see ordering code table
		70°C 10kHz (A)	60°C 10kHz (A)	≤50°C 10kHz (A)		20°C 10kHz (mΩ)	(K/W)	20°C (V/μS)	±1,0 (mm)	±1,0 (mm)	±1,0 (mm)	±0,5 (mm)	±0,5 (mm)	±0,05 (mm)	
1000 3A	55	20,0	28,2	34,5	825	4,4	5,7	15	57,5	70	35	52,5	20,3	1,2	FCS3ADS556##H85220DE3
	60	22,0	31,0	36,0	900	4,0	5,2	15	57,5	53	50	52,5	20,3	1,2	FCS3ADS606##HA5220DE3
	60	22,0	31,0	36,0	900	4,0	5,2	15	57,5	80	35	52,5	20,3	1,2	FCS3ADS606##K45220DE3
	60	22,0	31,0	36,0	900	4,0	5,2	15	57,5	65	45	52,5	20,3	1,2	FCS3ADS606##H75220DE3
1100 A3	1	2,5	3,5	4,3	70	45,0	35,6	70	32	20	11	27,5	\	0,8	FCSA3DS105##142700BE3
	1,5	3,5	4,9	6,0	105	30,0	27,2	70	32	22	13	27,5	\	0,8	FCSA3DS155##172700BE3
	2	4,0	5,6	6,9	140	25,0	25	70	32	24,5	15	27,5	\	0,8	FCSA3DS205##1J2700BE3
	2,2	5,0	7,0	8,6	154	16,5	24,2	70	32	28	14	27,5	\	0,8	FCSA3DS225##1C2700BE3
	3,3	6,5	9,1	11,2	231	11,5	20,6	70	32	28	18	27,5	\	0,8	FCSA3DS335##1D2700BE3
	4	8,0	11,3	12,0	280	10,5	14,9	70	32	33	18	27,5	\	0,8	FCSA3DS405##1F2700BE3
	5	8,5	12,0	12,0	350	9,5	14,6	70	32	37	22	27,5	\	0,8	FCSA3DS505##1I2700BE3
	6,8	12,0	17,0	20,8	272	13,5	5,1	40	42,5	33,5	22	37,5	10,2	1	FCSA3DS685##FT3710CE3
	8	10,5	14,8	15,0	320	14,0	6,5	40	42,5	40	20	37,5	\	1	FCSA3DS805##F23700CE3
	8	12,5	17,7	21,7	320	12,5	5,1	40	42,5	40	20	37,5	10,2	1	FCSA3DS805##F23710CE3
	8	12,5	17,7	21,7	320	12,5	5,1	40	42,5	37	22	37,5	10,2	1	FCSA3DS805##FQ3710CE3
	9	12,8	18,1	22,1	360	12,2	5	40	42,5	37	22	37,5	10,2	1	FCSA3DS905##FQ3710CE3
	10	14,0	15,0	15,0	400	9,0	5,7	40	42,5	44	24	37,5	\	1	FCSA3DS106##F93700CE3
	10	15,0	21,2	26,0	400	8,5	5,2	40	42,5	44	24	37,5	10,2	1	FCSA3DS106##F93710CE3
	12	15,5	22,0	26,9	480	7,5	5,5	40	42,5	45	30	37,5	20,3	1,2	FCSA3DS126##FF3720DE3
	15	16,0	22,5	27,6	600	7,0	5,6	40	42,5	45	30	37,5	20,3	1,2	FCSA3DS156##FF3720DE3
	18	15,5	22,0	26,9	720	7,5	5,5	40	42,5	50	35	37,5	20,3	1,2	FCSA3DS186##FK3720DE3
	20	16,5	23,3	28,5	400	7,2	5,1	20	42,5	50	35	37,5	20,3	1,2	FCSA3DS206##FK3720DE3
	20	12,0	16,9	20,7	400	8,5	8,2	20	57,5	45	30	52,5	20,3	1,2	FCSA3DS206##HH5220DE3
	25	13,0	18,4	22,5	500	8,2	7,2	20	57,5	50	35	52,5	20,3	1,2	FCSA3DS256##HL5220DE3
	30	15,0	21,1	25,9	600	5,0	8,9	20	57,5	50	35	52,5	20,3	1,2	FCSA3DS306##HL5220DE3
	35	16,0	22,5	27,6	700	4,9	8	20	57,5	60	35	52,5	20,3	1,2	FCSA3DS356##H65220DE3
	40	17,0	24,0	29,4	800	5,5	6,3	20	57,5	65	35	52,5	20,3	1,2	FCSA3DS406##KA5220DE3
	40	17,0	24,0	29,4	800	5,5	6,3	20	57,5	55	45	52,5	20,3	1,2	FCSA3DS406##HS5220DE3
	45	18,0	25,4	31,2	900	5,4	5,7	20	57,5	70	35	52,5	20,3	1,2	FCSA3DS456##H85220DE3
50	19,5	27,4	33,6	1000	5,2	5,1	20	57,5	65	45	52,5	20,3	1,2	FCSA3DS506##H75220DE3	
50	20,0	28,1	34,5	1000	4,5	5,6	20	57,5	53	50	52,5	20,3	1,2	FCSA3DS506##HA5220DE3	
1200 3B	1	4,5	6,3	7,7	80	32,5	15,2	80	32	20	11	27,5	\	0,8	FCS3BDS105##142700BE3
	2	5,0	7,0	8,6	160	32,5	12,3	80	32	24,5	15	27,5	\	0,8	FCS3BDS205##1J2700BE3
	2,2	5,5	7,7	9,5	176	17,0	19,4	80	32	28	18	27,5	\	0,8	FCS3BDS225##1D2700BE3
	3	7,0	9,8	12,0	240	16,0	12,8	80	32	28	18	27,5	\	0,8	FCS3BDS305##1D2700BE3
	3,3	8,0	11,3	12,0	264	13,5	11,6	80	32	33	18	27,5	\	0,8	FCS3BDS335##1F2700BE3
	5	10,0	12,0	12,0	400	12,0	8,3	80	32	37	22	27,5	\	0,8	FCS3BDS505##1I2700BE3
	5	7,5	10,5	12,9	225	15,5	11,5	45	42,5	33,5	22	37,5	\	1	FCS3BDS505##FT3700CE3
	6	7,5	10,5	12,9	270	15,5	11,5	45	42,5	40	20	37,5	\	1	FCS3BDS605##F23700CE3
	7	8,0	11,3	13,8	315	15,2	10,3	45	42,5	37	22	37,5	10,2	1	FCS3BDS705##FQ3710CE3
	8	9,0	12,7	15,5	360	12,5	9,9	45	42,5	44	24	37,5	10,2	1	FCS3BDS805##F93710CE3
	10	10,0	14,1	17,3	450	10,5	9,5	45	42,5	44	24	37,5	10,2	1	FCS3BDS106##F93710CE3
	10	12,0	16,9	20,7	450	8,0	8,7	45	42,5	45	30	37,5	20,3	1,2	FCS3BDS106##FF3720DE3
	15	15,0	21,2	26,0	675	6,5	6,8	45	42,5	50	35	37,5	20,3	1,2	FCS3BDS156##FK3720DE3
	20	13,0	18,3	22,4	500	8,5	7	25	57,5	45	30	52,5	20,3	1,2	FCS3BDS206##HH5220DE3
	25	15,0	21,2	26,0	625	6,5	6,8	25	57,5	50	35	52,5	20,3	1,2	FCS3BDS256##HL5220DE3
	30	17,0	24,0	29,4	750	5,5	6,3	25	57,5	55	45	52,5	20,3	1,2	FCS3BDS306##HS5220DE3
	30	17,0	24,0	29,4	750	5,5	6,3	25	57,5	60	35	52,5	20,3	1,2	FCS3BDS306##H65220DE3
	35	18,0	25,4	31,1	875	5,0	6,2	25	57,5	55	45	52,5	20,3	1,2	FCS3BDS356##HS5220DE3
	35	18,0	25,4	31,1	875	5,0	6,2	25	57,5	70	35	52,5	20,3	1,2	FCS3BDS356##H85220DE3
	40	20,0	28,1	34,5	1000	4,5	5,6	25	57,5	53	50	52,5	20,3	1,2	FCS3BDS406##HA5220DE3
45	22,0	31,1	36,0	1125	4,3	4,8	25	57,5	65	45	52,5	20,3	1,2	FCS3BDS456##H75220DE3	

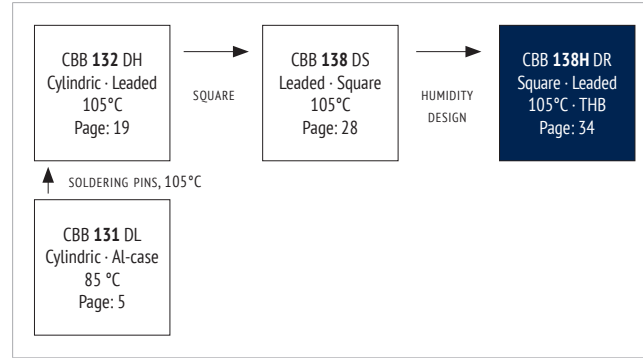
(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

DC-LINK

FEATURES

- DC-Link
- Design for DC Link Application
- Metal sprayed contacts for low ESR
- Self-healing
- THB Design (high humidity)

OVERVIEW



PRODUCT



APPLICATIONS

- Frequency inverter and intermediate circuits
- Industry high-end power supplies

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105°C ($\Theta_{\text{hotspot}} \leq 105^\circ\text{C}$) $\Theta_{\text{hotspot}} = 85 - 105^\circ\text{C}$: See Voltage Derating Diagram
Storage Temperature	-40 ~ 105°C
Rated Voltage U_{RDC}	450 ~ 1.700 V _{DC}
Capacitance Range	1 ~ 110 μF
Capacitance Tolerance	$\pm 10\%$ (K), $\pm 5\%$ (J)
Voltage between Terminals U_{TT}	$1,5 * U_{\text{RDC}}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{\text{AC}}$ (20°C, 50 Hz, 10s)
Dielectric Dissipation Factor $\tan \delta_0$	$\leq 2 * 10^{-4}$ (20 °C, 1 kHz)
Insulator Resistance R_i °C	$\geq 5.000 M\Omega * \mu\text{F}$ (20 °C, 100 V _{DC} , 1 min)
Max. Overvoltage	$1,1 * U_{\text{RDC}}$ (30 % of time under load) $1,15 * U_{\text{RDC}}$ (30 min. per day) $1,2 * U_{\text{RDC}}$ (5 min. per day) $1,3 * U_{\text{RDC}}$ (1 min. per day) $1,5 * U_{\text{RDC}}$ (max. 30 ms, 100ms per day)
Life Time Expectancy	$\geq 100.000\text{h}$, failure rate $\leq 50 \text{ FIT}$ (70°C)
Reference Standard	IEC 61071:2007
THB: High Temperature & Humidity Test	Temperature: 85°C $\pm 2^\circ\text{C}$ Humidity: 85% $\pm 2\%$ Voltage: U_R (50/60Hz) Duration: 1000h Capacity Change ($\Delta C/C$): $\leq 10\%$

ENVIRONMENTAL

The products are RoHS, WEEE and REAcH compliant.

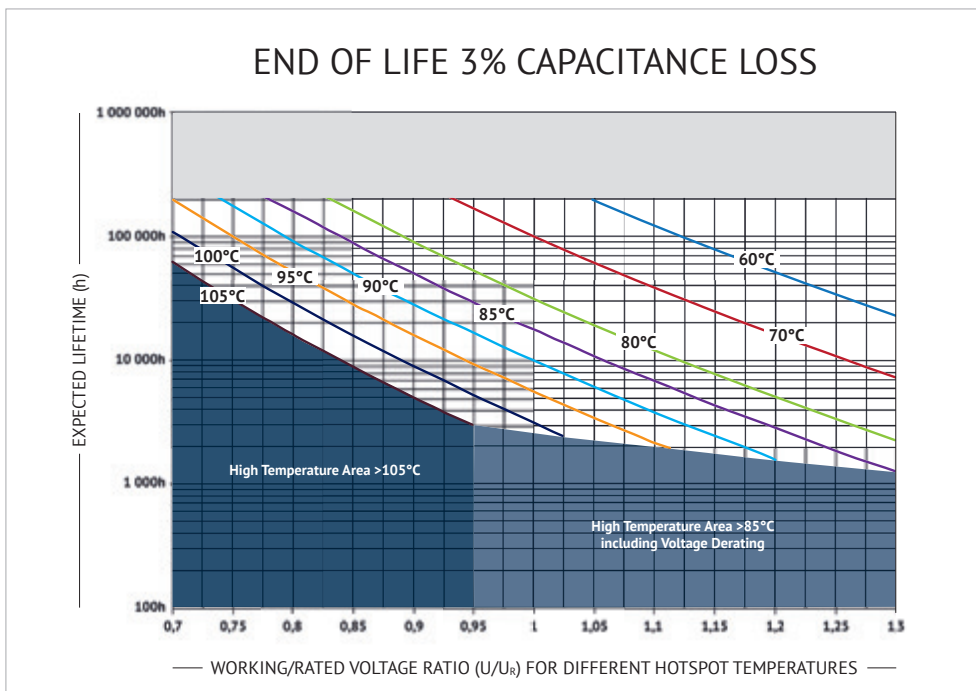
The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

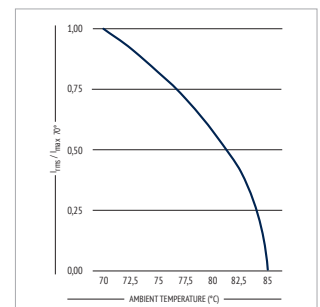
UL94-V0:

Plastic & Compound Mass

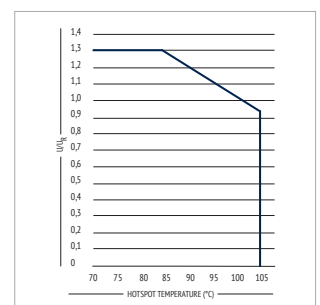
LIFETIME



CURRENT DERATING

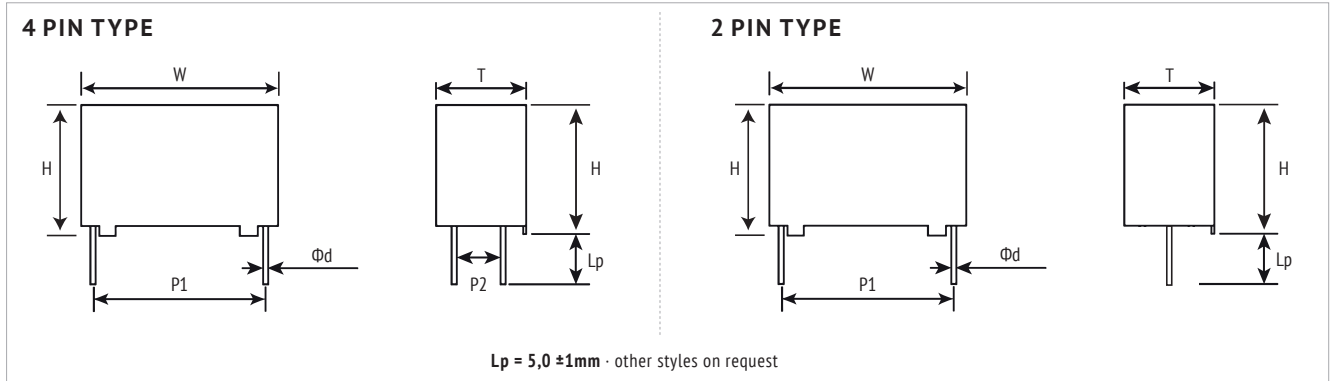


VOLTAGE DERATING

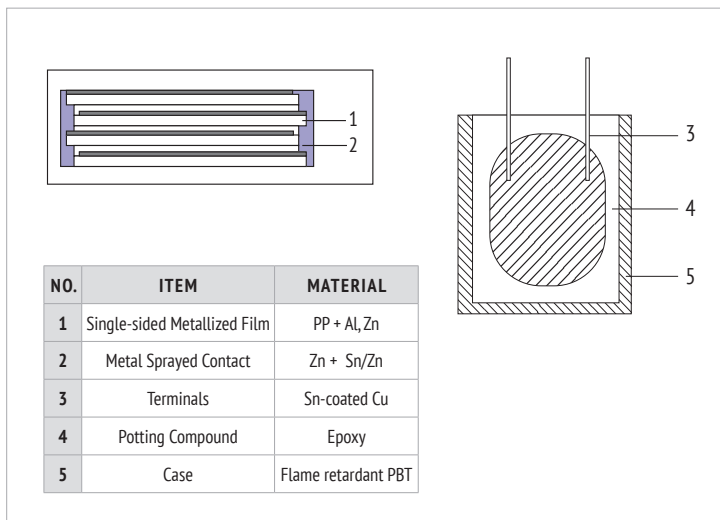


DC-LINK

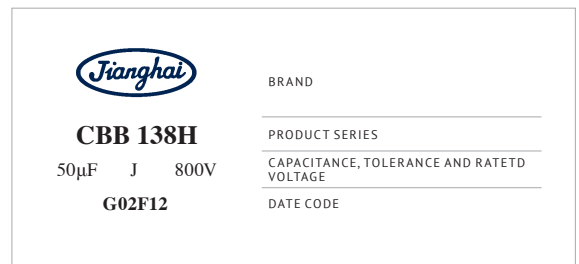
DIMENSIONS



INTERNAL CONSTRUCTION



MARKING



ORDER CODE

FC	S	3B	DR	105	K	A	FK	37	20	C	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (μF)	Capacitance tolerance	Pin Style (mm)	Dimension Code WxHxT (mm)	Pitch P ₁ (mm)	Pitch P ₂ (mm)	Leadwire Diameter Ød	For internal use
Film Cap. = FC	Square box = S	450 2W 500 2H 550 2Y 600 2S 700 2Q 800 2K 900 R2 1000 3A 1100 A3 1200 3B 1300 03 1500 C3 1700 F3	CBB 138H = DR	0,68 684 0,82 824 1,0 105 1,2 125 2,0 205 5,0 505 10 106 20 206	±5% J ±10% K	4 Pin Lp = 8mm K 4 Pin Lp = 5mm A 4 Pin Lp = 4,5mm L 4 Pin Lp = 4mm S 4 Pin Lp = 3,5mm J 2 Pin long leads (~ 20mm) C 2 Pin Lp = 5mm B 2 Pin Lp = 4,5mm T 2 Pin Lp = 4,0mm M 2 Pin Lp = 3,5mm U 2 Pin Lp = 3,2mm V	32,0 x 20,0 x 11,0 I4 32,0 x 22,0 x 13,0 I7 32,0 x 24,5 x 15,0 IJ 32,0 x 28,0 x 14,0 IC 32,0 x 28,0 x 18,0 ID 32,0 x 33,0 x 18,0 IF 32,0 x 37,0 x 22,0 II 42,5 x 18,0 x 24,0 FL 42,5 x 33,5 x 22,0 FT 42,5 x 35,5 x 33,5 FC 42,5 x 37,0 x 28,0 F1 42,5 x 40,0 x 20,0 F2 42,5 x 44,0 x 24,0 F9 42,5 x 45,0 x 30,0 FF 42,5 x 50,0 x 35,0 FK 42,5 x 60,0 x 45,0 FW 57,5 x 55,0 x 45,0 HS 57,5 x 30,0 x 35,0 H5 57,5 x 43,5 x 29,5 HG 57,5 x 45,0 x 30,0 HH 57,5 x 45,0 x 35,0 HJ 57,5 x 50,0 x 35,0 HL 57,5 x 53,0 x 50,0 HA 57,5 x 55,0 x 40,0 HM 57,5 x 60,0 x 35,0 H6 57,5 x 60,0 x 45,0 H2	22,5 22 27,5 27 37,5 37 52,5 52	20,3 20 10,2 10 - 00	0,6 A 0,8 B 1,0 C 1,2 D 0,5 E	

RATINGS

U_R ≤85°C (V _{DC})	C_R (µF)	70°C, 10kHz (A)	I _{max} 60°C, 10kHz (A)	≤50°C, 10kHz (A)	î ⁽¹⁾ (A)	R _s 20°C, 10kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	dV/dt 20°C (V/µs)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P ₁ ±0,5 (mm)	P ₂ ±0,5 (mm)	ød ±0,05 (mm)	ORDER CODE * " " to be defined, see ordering code table
450 2W	5	5,0	7,0	8,6	250	15,0	26,7	50	32,0	20,0	11,0	27,5	-	0,8	FCS2WDR505##142700BGE3
	10	7,5	10,6	12,0	500	8,5	20,9	50	32,0	28,0	14,0	27,5	-	0,8	FCS2WDR106##1C2700BGE3
	18	11,0	12,0	12,0	900	6,0	13,8	50	32,0	37,0	22,0	27,5	-	0,8	FCS2WDR186##1I2700BGE3
	20	12,0	12,0	12,0	1000	5,0	12,8	50	32,0	37,0	22,0	27,5	-	0,8	FCS2WDR206##1I2700BGE3
	22	12,0	12,0	12,0	1100	5,0	12,8	50	32,0	37,0	22,0	27,5	-	0,8	FCS2WDR226##1I2700BGE3
	30	12,0	16,9	20,7	900	6,0	11,6	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2WDR306##F23710CGE3
	40	14,0	19,7	24,2	1200	5,5	9,3	30	42,5	37,0	28,0	37,5	10,2	1,0	FCS2WDR406##F13710CGE3
	50	15,0	21,2	25,9	1500	4,0	11,1	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2WDR506##FF3720DGE3
	60	16,5	23,3	28,5	1800	4,0	9,2	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2WDR606##FF3720DGE3
	80	16,0	22,5	27,6	1200	4,0	9,8	15	57,5	45,0	30,0	52,5	20,3	1,2	FCS2WDR806##HHS220DGE3
100	18,0	25,4	31,2	1500	3,8	8,1	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2WDR107##HLS220DGE3	
550 2Y	3	4,0	5,6	6,9	150	28,0	22,3	50	32,0	20,0	11,0	27,5	-	0,8	FCS2YDR305##142700BGE3
	5	6,0	8,4	10,4	250	14,0	19,8	50	32,0	22,0	13,0	27,5	-	0,8	FCS2YDR505##172700BGE3
	8	8,5	12,0	12,0	400	12,5	11,1	50	32,0	28,0	14,0	27,5	-	0,8	FCS2YDR805##1C2700BGE3
	10	10,0	12,0	12,0	500	8,0	12,5	50	32,0	33,0	18,0	27,5	-	0,8	FCS2YDR106##1F2700BGE3
	15	12,0	12,0	12,0	750	6,5	9,1	50	32,0	37,0	22,0	27,5	-	0,8	FCS2YDR156##1I2700BGE3
	15	15,0	21,1	25,9	750	5,5	8,1	50	32,0	37,0	22,0	27,5	10,2	1,0	FCS2YDR156##1I2710CGE3
	20	12,5	17,7	21,7	600	6,5	9,8	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2YDR206##F23710CGE3
	22	13,5	19,1	23,4	660	6,5	8,4	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2YDR226##F23710CGE3
	25	14,5	20,5	25,1	750	6,5	7,3	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2YDR256##F23710CGE3
	30	16,0	22,6	27,7	900	6,0	6,5	30	42,5	44,0	24,0	37,5	10,2	1,0	FCS2YDR306##F93710CGE3
	35	18,0	25,5	31,3	1050	6,0	5,1	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2YDR356##FF3720DGE3
	40	18,0	25,4	31,2	1200	5,5	5,6	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2YDR406##FF3720DGE3
	50	20,0	28,2	34,6	1500	5,0	5,0	30	42,5	50,0	35,0	37,5	20,3	1,2	FCS2YDR506##FK3720DGE3
	60	18,0	25,5	31,2	900	4,8	6,4	15	57,5	45,0	30,0	37,5	20,3	1,2	FCS2YDR606##HHS220DGE3
	75	20,0	28,2	34,6	1125	5,0	5,0	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2YDR756##HLS220DGE3
100	24,0	33,7	36,0	1500	4,5	3,9	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2YDR107##HSS220DGE3	
110	26,0	36,0	36,0	1650	4,0	3,7	15	57,5	53,0	50,0	52,5	20,3	1,2	FCS2YDR117##HAS220DGE3	
600 2S	3	4,0	5,6	6,9	150	28,0	22,3	50	32,0	20,0	11,0	27,5	-	0,8	FCS2SDR305##142700BGE3
	4	5,0	7,0	8,6	200	26,0	15,4	50	32,0	20,0	11,0	27,5	-	0,8	FCS2SDR405##142700BGE3
	5	6,0	8,4	10,3	250	14,5	19,2	50	32,0	28,0	14,0	27,5	-	0,8	FCS2SDR505##1C2700BGE3
	8	7,5	10,6	12,0	400	12,0	14,8	50	32,0	28,0	14,0	27,5	-	0,8	FCS2SDR805##1C2700BGE3
	10	8,5	12,0	12,0	500	7,5	18,5	50	32,0	33,0	18,0	27,5	-	0,8	FCS2SDR106##1F2700BGE3
	12	9,5	12,0	12,0	600	7,5	14,8	50	32,0	33,0	18,0	27,5	-	0,8	FCS2SDR126##1F2700BGE3
	15	10,5	12,0	12,0	750	7,5	12,1	50	32,0	37,0	22,0	27,5	-	0,8	FCS2SDR156##1I2700BGE3
	20	11,0	15,5	19,0	600	6,0	13,8	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2SDR206##F23710CGE3
	30	13,0	18,3	22,4	900	5,5	10,8	30	42,5	37,0	28,0	37,5	10,2	1,0	FCS2SDR306##F13710CGE3
	40	18,0	25,4	31,2	1200	4,0	7,7	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2SDR406##FF3720DGE3
	50	14,0	19,8	24,3	750	6,5	7,8	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2SDR506##HLS220DGE3
	60	16,0	22,6	27,7	900	5,0	7,8	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2SDR606##HLS220DGE3
	70	18,0	25,4	31,1	1050	5,0	6,2	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2SDR706##HLS220DGE3
	75	23,0	32,4	36,0	1125	5,0	3,8	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2SDR756##HLS220DGE3
	80	24,6	34,6	36,0	1200	4,9	3,4	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2SDR806##HLS220DGE3
	80	20,0	28,1	34,5	1200	4,0	6,3	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2SDR806##HSS220DGE3
	90	24,0	34,0	36,0	1350	4,0	4,3	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2SDR906##HSS220DGE3
	100	26,0	36,0	36,0	1500	4,0	3,7	15	57,5	53,0	50,0	52,5	20,3	1,2	FCS2SDR107##HAS220DGE3
	110	28,0	36,0	36,0	1650	3,5	3,6	15	57,5	60,0	45,0	52,5	20,3	1,2	FCS2SDR117##H25220DGE3
700 2Q	3	4,5	6,3	7,8	150	28,0	17,6	50	32,0	20,0	11,0	27,5	-	0,8	FCS2QDR305##142700BGE3
	3,3	5,5	7,7	9,5	165	26,0	12,7	50	32,0	28,0	14,0	27,5	-	0,8	FCS2QDR335##1C2700BGE3
	5	6,0	8,4	10,4	250	14,0	19,8	50	32,0	28,0	14,0	27,5	-	0,8	FCS2QDR505##1C2700BGE3
	8	9,0	12,0	12,0	400	10,0	12,3	50	32,0	33,0	18,0	27,5	-	0,8	FCS2QDR805##1F2700BGE3
	10	10,0	12,0	12,0	500	7,0	14,3	50	32,0	33,0	18,0	27,5	-	0,8	FCS2QDR106##1F2700BGE3
	10	12,0	12,0	12,0	500	6,5	10,7	50	32,0	37,0	22,0	27,5	-	0,8	FCS2QDR106##1I2700BGE3
	10	11,5	15,0	15,0	300	7,5	10,1	30	42,5	18,0	24,0	37,5	-	1,0	FCS2QDR106##FL3700CGE3
	15	9,0	12,7	15,0	450	9,0	13,7	30	42,5	33,5	22,0	37,5	-	1,0	FCS2QDR156##FT3700CGE3
	15	10,0	14,1	17,3	450	8,0	12,5	30	42,5	33,5	22,0	37,5	10,2	1,0	FCS2QDR156##FT3710CGE3
	15	10,0	14,1	17,3	450	8,0	12,5	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2QDR156##F23710CGE3
	20	12,0	16,9	20,7	600	7,5	9,3	30	42,5	37,0	28,0	37,5	10,2	1,0	FCS2QDR206##F13710CGE3
	22	14,0	19,8	24,3	660	6,5	7,8	30	42,5	44,0	24,0	37,5	10,2	1,0	FCS2QDR226##F93710CGE3
	25	16,0	22,6	27,7	750	6,0	6,5	30	42,5	44,0	24,0	37,5	10,2	1,0	FCS2QDR256##F93710CGE3
	30	25,1	35,5	36,0	900	4,8	3,3	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2QDR306##FF3720DGE3
	35	20,0	28,4	34,8	1050	5,5	4,5	30	42,5	50,0	35,0	37,5	20,3	1,2	FCS2QDR356##FK3720DGE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

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U_R ≤85°C (V _{DC})	C_R (μF)	70°C, 10kHz (A)	I _{max} 60°C, 10kHz (A)	≤50°C, 10kHz (A)	$\hat{i}^{(1)}$ (A)	R_s 20°C, 10kHz (mΩ)	$R_{th}^{(2)}$ (K/W)	dV/dt 20°C (V/μs)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	ød ±0,05 (mm)	ORDER CODE *" to be defined, see ordering code table
700 2Q	40	14,0	19,8	24,2	600	5,0	10,2	15	57,5	45,0	30,0	52,5	20,3	1,2	FCS2QDR406##HHS220DGE3
	45	18,5	26,1	32,0	675	6,5	4,5	15	57,5	45,0	30,0	52,5	20,3	1,2	FCS2QDR456##HHS220DGE3
	50	15,0	21,1	25,9	750	4,8	9,3	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2QDR506##HLS220DGE3
	55	16,0	22,6	27,6	825	4,5	8,7	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2QDR556##HLS220DGE3
	60	20,2	28,4	34,7	900	5,9	4,2	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2QDR606##HLS220DGE3
	65	20,0	28,1	34,5	975	4,0	6,3	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2QDR656##HSS220DGE3
	70	20,0	28,2	34,5	1050	3,8	6,6	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2QDR706##HSS220DGE3
	75	20,0	28,2	34,5	1125	3,8	6,6	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2QDR756##HSS220DGE3
	80	28,3	36,0	36,0	1200	4,2	3,0	15	57,5	55,0	40,0	52,5	20,3	1,2	FCS2QDR806##HMS220DGE3
	90	24,0	33,8	36,0	1350	3,5	5,0	15	57,5	53,0	50,0	52,5	20,3	1,2	FCS2QDR906##HAS220DGE3
800 2K	3,3	4,0	5,6	6,9	165	25,0	25,0	50	32,0	28,0	14,0	27,5	-	0,8	FCS2KDR335##IC2700BGE3
	5	6,0	8,4	10,4	250	12,0	23,1	50	32,0	28,0	14,0	27,5	-	0,8	FCS2KDR505##IC2700BGE3
	9	10,0	12,0	12,0	450	10,5	9,5	50	32,0	33,0	18,0	27,5	-	0,8	FCS2KDR905##IF2700BGE3
	10	11,5	12,0	12,0	500	9,5	8,0	50	32,0	37,0	22,0	27,5	-	0,8	FCS2KDR106##I12700BGE3
	15	10,0	14,1	17,3	450	8,0	12,5	30	42,5	40,0	20,0	37,5	10,2	1,0	FCS2KDR156##F23710CGE3
	15	15,0	21,2	25,9	450	6,0	7,4	30	57,5	43,5	29,5	52,5	20,3	1,0	FCS2KDR156##HG5220CGE3
	20	12,0	16,9	20,8	600	7,0	9,9	30	42,5	37,0	28,0	37,5	10,2	1,0	FCS2KDR206##F13710CGE3
	22	14,0	19,8	24,2	660	6,0	8,5	30	42,5	44,0	24,0	37,5	10,2	1,0	FCS2KDR226##F93710CGE3
	25	14,0	19,7	24,2	750	5,5	9,3	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2KDR256##FF3720DGE3
	25	16,8	23,7	29,0	750	7,1	5,0	30	42,5	35,5	33,5	37,5	20,3	1,2	FCS2KDR256##FC3720DGE3
	30	10,0	14,1	17,3	450	11,5	8,7	15	57,5	43,5	29,5	52,5	20,3	1,0	FCS2KDR306##HG5220CGE3
	30	16,0	22,6	27,6	900	4,5	8,7	30	42,5	45,0	30,0	37,5	20,3	1,2	FCS2KDR306##FF3720DGE3
	35	14,2	20,1	24,6	525	6,5	7,6	15	57,5	45,0	30,0	52,5	20,3	1,2	FCS2KDR356##HHS220DGE3
	40	14,0	19,8	24,2	600	6,0	8,5	15	57,5	45,0	30,0	52,5	20,3	1,2	FCS2KDR406##HHS220DGE3
	45	15,5	21,8	26,7	675	5,5	7,6	15	57,5	45,0	30,0	52,5	20,3	1,2	FCS2KDR456##HHS220DGE3
	47	17,5	24,8	30,3	705	5,0	6,5	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2KDR476##HLS220DGE3
	50	16,0	22,6	36,0	750	5,0	7,8	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2KDR506##HLS220DGE3
	55	17,0	24,0	29,4	825	4,6	7,5	15	57,5	50,0	35,0	52,5	20,3	1,2	FCS2KDR556##HLS220DGE3
	60	18,0	25,5	31,2	1800	3,2	9,6	30	42,5	60,0	45,0	37,5	20,3	1,2	FCS2KDR606##FW3720DGE3
	65	19,0	26,9	32,9	975	4,0	6,9	15	57,5	60,0	35,0	52,5	20,3	1,2	FCS2KDR656##H65220DGE3
65	20,0	28,1	34,5	975	4,0	6,3	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2KDR656##HSS220DGE3	
70	20,0	28,2	34,5	1050	3,8	6,6	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2KDR706##HSS220DGE3	
75	20,0	28,2	34,5	1125	3,8	6,6	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2KDR756##HSS220DGE3	
80	22,0	31,1	36,0	1200	3,5	5,9	15	57,5	53,0	50,0	52,5	20,3	1,2	FCS2KDR806##HAS220DGE3	
90	24,0	33,8	36,0	1350	3,5	5,0	15	57,5	53,0	50,0	52,5	20,3	1,2	FCS2KDR906##HAS220DGE3	
90	28,3	36,0	36,0	1350	4,2	3,0	15	57,5	55,0	45,0	52,5	20,3	1,2	FCS2KDR906##HSS220DGE3	
900 R2	2	3,0	4,2	5,1	120	25,0	44,4	60	32,0	20,0	11,0	27,5	-	0,8	FCSR2DR205##142700BGE3
	3	5,0	7,0	8,6	180	18,5	21,6	60	32,0	22,0	13,0	27,5	-	0,8	FCSR2DR305##172700BGE3
	3,3	5,0	7,0	8,6	198	18,5	21,6	60	32,0	24,5	15,0	27,5	-	0,8	FCSR2DR335##1J2700BGE3
	5	7,0	9,9	12,0	300	12,5	16,3	60	32,0	28,0	18,0	27,5	-	0,8	FCSR2DR505##1D2700BGE3
	6	8,0	11,3	12,0	360	11,0	14,2	60	32,0	33,0	18,0	27,5	-	0,8	FCSR2DR605##1F2700BGE3
	8	10,5	12,0	12,0	480	10,0	9,1	60	32,0	37,0	22,0	27,5	-	0,8	FCSR2DR805##1I2700BGE3
	10	12,0	12,0	12,0	600	10,0	6,9	60	32,0	37,0	22,0	27,5	-	0,8	FCSR2DR106##1I2700BGE3
	10	8,5	12,0	14,7	350	12,0	11,5	35	42,5	40,0	20,0	37,5	-	1,0	FCSR2DR106##F23700CGE3
	10	9,5	13,4	16,4	350	11,5	9,6	35	42,5	40,0	20,0	37,5	10,2	1,0	FCSR2DR106##F23710CGE3
	15	10,5	14,8	15,0	525	8,0	11,3	35	42,5	44,0	24,0	37,5	-	1,0	FCSR2DR156##F93700CGE3
	15	12,0	16,9	20,7	525	7,5	9,3	35	42,5	44,0	24,0	37,5	10,2	1,0	FCSR2DR156##F93710CGE3
	18	10,5	14,8	15,0	630	8,0	11,3	35	42,5	44,0	24,0	37,5	-	1,0	FCSR2DR186##F93700CGE3
	18	12,0	16,9	20,7	630	7,5	9,3	35	42,5	44,0	24,0	37,5	10,2	1,0	FCSR2DR186##F93710CGE3
	20	14,0	15,0	15,0	700	6,0	8,5	35	42,5	45,0	30,0	37,5	-	1,2	FCSR2DR206##FF3700DGE3
	20	15,0	21,1	25,9	700	5,5	8,1	35	42,5	45,0	30,0	37,5	20,3	1,2	FCSR2DR206##FF3720DGE3
	25	16,8	23,8	29,1	750	6,9	5,1	30	42,5	45,0	30,0	37,5	20,3	1,2	FCSR2DR256##FF3720DGE3
	30	19,0	26,9	33,0	1050	5,0	5,5	35	42,5	50,0	35,0	37,5	20,3	1,2	FCSR2DR306##FK3720DGE3
	30	15,0	21,1	25,9	450	5,5	8,1	15	57,5	45,0	30,0	52,5	20,3	1,2	FCSR2DR306##HHS220DGE3
	35	15,5	21,8	26,7	525	5,5	7,6	15	57,5	50,0	35,0	52,5	20,3	1,2	FCSR2DR356##HLS220DGE3
	40	16,0	22,6	27,7	600	6,5	6,0	15	57,5	50,0	35,0	52,5	20,3	1,2	FCSR2DR406##HLS220DGE3
	40	13,5	19,0	23,3	600	8,9	6,2	15	57,5	45,0	30,0	52,5	20,3	1,2	FCSR2DR406##HHS220DGE3
	50	16,8	23,7	29,0	750	7,1	5,0	15	57,5	50,0	35,0	52,5	20,3	1,2	FCSR2DR506##HLS220DGE3
55	19,0	26,8	32,9	825	3,5	7,9	15	57,5	60,0	35,0	52,5	20,3	1,2	FCSR2DR556##H65220DGE3	
55	20,0	28,1	34,5	825	3,4	7,4	15	57,5	55,0	45,0	52,5	20,3	1,2	FCSR2DR556##HSS220DGE3	
60	21,9	30,9	36,0	900	5,5	3,8	15	57,5	55,0	40,0	52,5	20,3	1,2	FCSR2DR606##HMS220DGE3	
60	20,0	28,1	34,5	900	3,4	7,4	15	57,5	55,0	45,0	52,5	20,3	1,2	FCSR2DR606##HSS220DGE3	
70	20,0	28,3	34,6	1050	3,2	7,8	15	57,5	53,0	50,0	52,5	20,3	1,2	FCSR2DR706##HAS220DGE3	
80	30,0	36,0	36,0	1200	5,0	2,2	15	57,5	55,0	40,0	52,5	20,3	1,2	FCSR2DR806##HMS220DGE3	

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

>>>



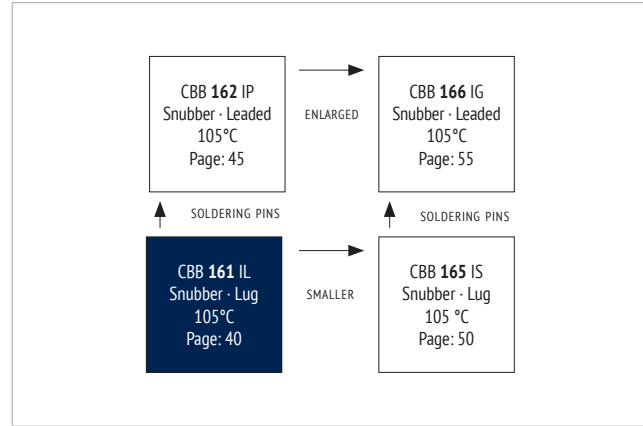
U_R $\leq 85^\circ\text{C}$ (V_{DC})	C_R (μF)	I_{max}			$\hat{i}^{(1)}$ (A)	R_s 20°C, 10kHz (m Ω)	$R_{th}^{(2)}$ (K/W)	dV/dt 20°C (V/ μs)	W $\pm 1,0$ (mm)	H $\pm 1,0$ (mm)	T $\pm 1,0$ (mm)	P_1 $\pm 0,5$ (mm)	P_2 $\pm 0,5$ (mm)	ϕd $\pm 0,05$ (mm)	ORDER CODE *# to be defined, see ordering code table
		70°C, 10kHz (A)	60°C, 10kHz (A)	$\leq 50^\circ\text{C}$, 10kHz (A)											
1300 O3	20	16,0	22,7	27,8	460	9,7	4,0	23	57,5	53,0	50,0	52,5	20,3	1,2	FCSO3DR206##HA5220DGE3
	27	19,5	27,5	33,7	621	7,3	3,6	23	57,5	50,0	35,0	52,5	20,3	1,2	FCSO3DR276##HL5220DGE3
1500 C3	10	10,0	14,1	17,3	500	11,5	8,7	50	42,5	45,0	30,0	37,5	20,3	1,2	FCSC3DR106##FF3720DGE3
	15	14,8	21,0	25,7	390	10,5	4,3	26	57,5	53,0	50,0	52,5	20,3	1,2	FCSC3DR156##HA5220DGE3
	25	18,7	26,4	32,4	650	7,5	3,8	26	57,5	55,0	40,0	52,5	20,3	1,2	FCSC3DR256##HM5220DGE3
1700 · F3	12	13,9	19,7	24,1	348	8,3	6,2	29	57,5	45,0	35,0	52,5	20,3	1,2	FCSF3DR126##HJ5220DGE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

FEATURES

- 105°C
- Very low dissipation factor
- Highest peak pulse capability
- Double-sided metallized electrodes
- Internal series connection
- Metal sprayed contacts for low ESL
- Plates for direct IGBT connection
- Self-healing

OVERVIEW



PRODUCT



APPLICATIONS

- High pulse and high frequency circuits
- IGBT applications

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\Theta_{hotspot} \leq 105$ °C) $\Theta_{hotspot} = 85-105$ °C: See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	700 ~ 2.000 V_{DC}
Capacitance Range	0,2 ~ 7,5 μF
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 * U_{RDC}$ (20 °C, 10s)
Voltage between Terminals & Case U_{TC}	$3.000 V_{AC}$ (20 °C, 50 Hz, 10s)
Capacitor Dissipation Factor $\tan \delta$	$\leq 5 * 10^{-4}$ (20 °C, 1 kHz)
Dielectric Dissipation Factor $\tan \delta_o$	$\leq 2 * 10^{-4}$ (20 °C, 1 kHz)
Insulation Resistance R_i °C	$\geq 30.000 M\Omega * \mu F$ (20 °C, 100 V_{DC} , 1 min)
Max. Overvoltage	$1,1 * U_{RDC}$ (30 % of time under load) $1,15 * U_{RDC}$ (30 min. per day) $1,2 * U_{RDC}$ (5 min. per day) $1,3 * U_{RDC}$ (1 min. per day) $1,5 * U_{RDC}$ (max. 30 ms, 100ms per day)
Life Time Expectancy	$\geq 100.000h$, failure rate ≤ 50 FIT (70°C)
Reference Standard	IEC 61071:2007, REACH, RoHS

ENVIRONMENTAL

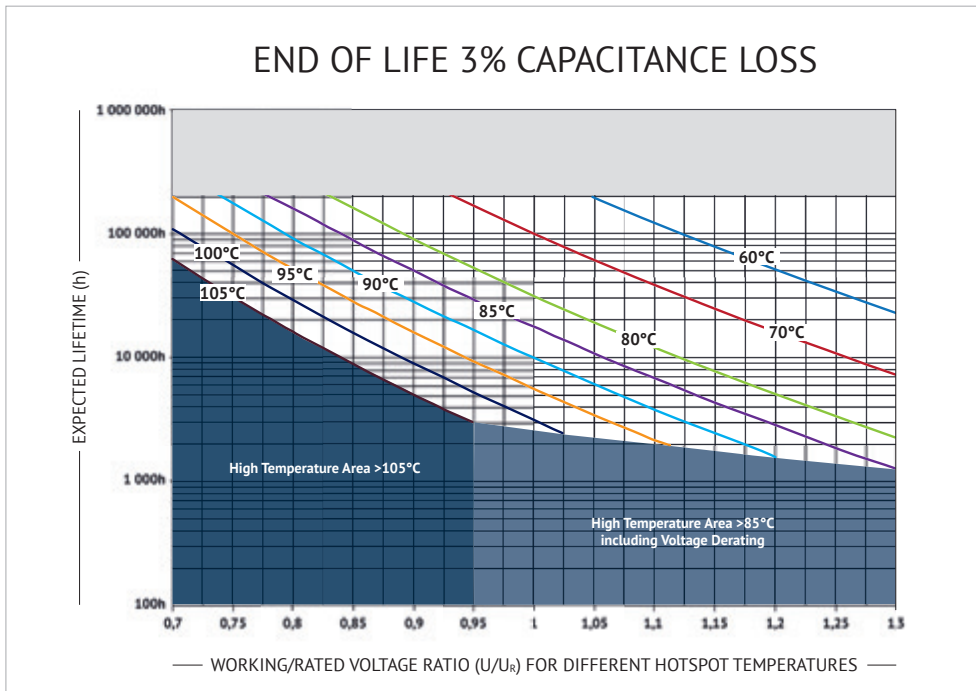
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

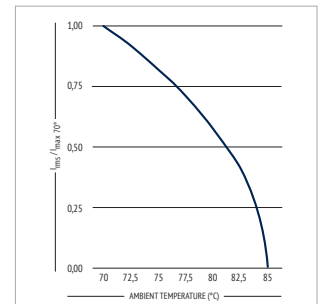
APPROVALS

UL94-V0:
Plastic & Compound Mass

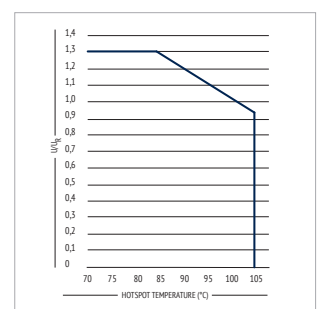
LIFETIME



CURRENT DERATING

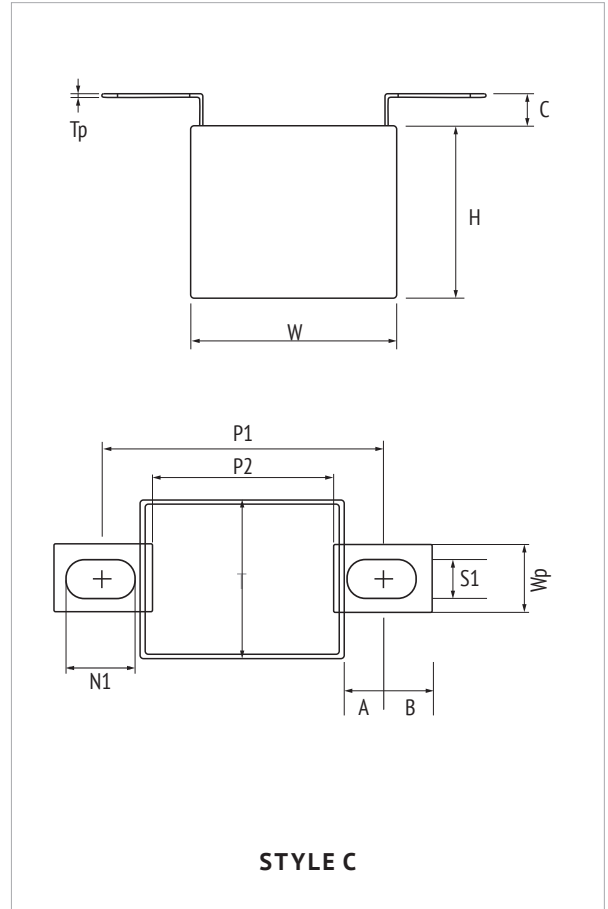
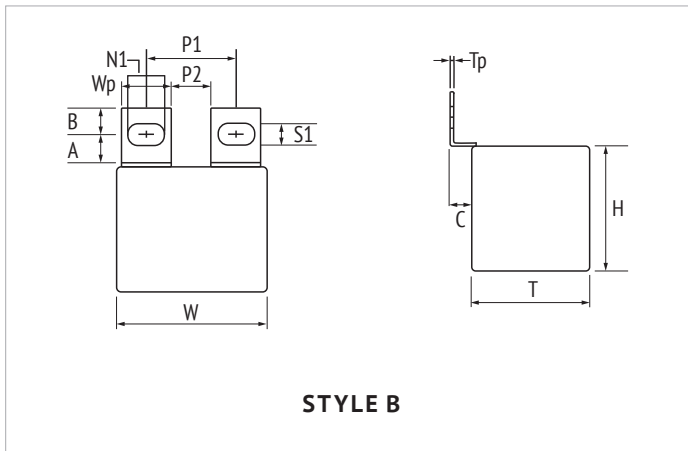
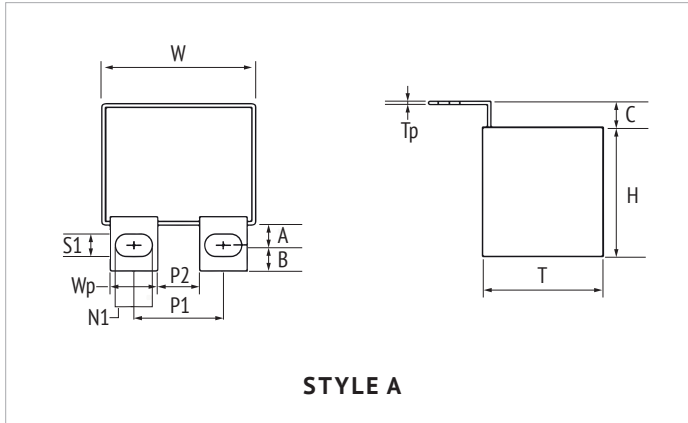


VOLTAGE DERATING



SNUBBER

■ DIMENSIONS



Terminal Style	Length of Case $W \pm 1,0$ (mm)	Mounting Hole Pitch $P1 \pm 0,5$ (mm)	Gap between Terminals $P2 \pm 0,5$ (mm)	Width Terminal Plate $Wp \pm 0,3$ (mm)	Thickness Terminal $Tp \pm 0,1$ (mm)	Distance of Terminal $C \pm 1$ (mm)	Width of Hole $S1 \pm 0,1$ (mm)	Length of Hole $N1 \pm 0,3$ (mm)	Position of Hole $A \pm 0,2$ (mm)	Distance of Hole $B \pm 0,2$ (mm)
Style A/B	42,5	24,0	10,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style A/B	42,5	26,0	12,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style A/B	57,5	24,0	10,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style A/B	57,5	37,0	23,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style C	42,5	60,0	38,0	14,0	1,0	6,0	M8: 8,2	M8: 14	8,5	10,0
Style C	57,5	75,0	53,0	14,0	1,0	6,0	M8: 8,2	M8: 14	8,5	10,0

SNUBBER

INTERNAL CONSTRUCTION

NO.	ITEM	MATERIAL
1	Dielectric Film	Polypropylene
2	Single-sided Metallized Film	PP + Al
3	Double-sided Metallized Carrier Film	PET + Al
4	Metal Sprayed Contact	Zn + Sn/Zn
5	Terminal	Sn-coated Cu
6	Potting Compound	Epoxy
7	Case	Flame retardant PBT

MARKING

ORDER CODE

FC	S	3B	IL	105	K	A	FA	40	26	19	1	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (µF)	Capacitance tolerance	Plate Style (mm)	Dimension Code (mm)	Pitch P ₁ (mm)	Gap P ₂ (mm)	Width of plates W _p (mm)	Hole Shape	For internal use
Film Cap. = FC	Square box = S	700 2Q 850 K2 1000 3A 1200 3B 1600 3C 2000 3D	CBB 161 = IL	0,22 224 0,33 334 0,47 474 0,68 684 0,82 824 1,0 105 1,2 125 1,5 155 2,0 205 2,2 225 2,5 255 3,0 305 3,3 335 4,0 405 4,7 475 5,0 505 6,0 605 6,8 685 10,0 106	±5% J ±10% K	Style A A Style B B Style C C	42,5 x 28 x 24 FA 42,5 x 33 x 33 FB 42,5 x 35,5 x 33,5 FC 42,5 x 36 x 24 FD 42,5 x 43 x 42 FE 42,5 x 45 x 30 FF 57,5 x 43,5 x 29,5 HG 57,5 x 45 x 30 HH 57,5 x 45 x 35 HJ 57,5 x 45 x 45 HK 57,5 x 50 x 35 HL 57,5 x 55 x 40 HM	24 24 26 26 37 37 60 60 75 75	10 10 12 12 23 23 38 38 53 53	14 14	Circular M6 Oval M6: 6,5x8,5 Circular M8 Oval M8: 8,5x10,5 Oval M6: 6,5x10,5 Oval 9x12 Circular ø5,5 Circular ø7,0 Circular ø5,0 Oval 8,5x14,5	0 1 2 3 7 5 A C E D

SNUBBER

RATINGS

U _{RDC} ≤85°C (V)	C _R (µF)	dV/dt 20°C (V/µS)	I ⁽¹⁾ (A)	R _S 20°C 100kHz (mΩ)	L _S 20°C (nH)	I _{max} 70°C 100kHz (A)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	ORDER CODE *#* to be defined, see ordering code table
700 V_{DC} 420 V_{AC} 2Q	1,20	325	390	10	≤20	12,4	42,5	28	24	FCS2QIL125##FA###14#E3
	1,80	325	585	8	≤20	16,8	42,5	36	24	FCS2QIL185##FD###14#E3
	2,20	325	715	7	≤20	18,8	42,5	33	33	FCS2QIL225##FB###14#E3
	2,50	325	813	6	≤20	20,3	42,5	35,5	33,5	FCS2QIL255##FC###14#E3
	3,00	325	975	5	≤20	22,4	42,5	45	30	FCS2QIL305##FF###14#E3
	4,00	325	1300	4	≤20	25,0	42,5	43	42	FCS2QIL405##FE###14#E3
	4,20	260	1092	3	≤20	26,0	57,5	43,5	29,5	FCS2QIL425##HG###14#E3
	4,50	260	1170	3	≤20	26,0	57,5	45	30	FCS2QIL455##HH###14#E3
	5,00	260	1300	3	≤20	27,0	57,5	45	35	FCS2QIL505##HJ###14#E3
	5,50	260	1430	2	≤20	27,0	57,5	50	35	FCS2QIL555##HL###14#E3
	6,00	260	1560	2	≤20	28,0	57,5	45	45	FCS2QIL605##HK###14#E3
	7,50	260	1950	2	≤20	30,0	57,5	55	40	FCS2QIL755##HM###14#E3
850 V_{DC} 450 V_{AC} K2	0,47	650	306	10	≤20	11,5	42,5	28	24	FCSK2IL474##FA###14#E3
	0,70	650	455	10	≤20	15,3	42,5	36	24	FCSK2IL704##FD###14#E3
	0,80	650	520	10	≤20	11,8	42,5	28	24	FCSK2IL804##FA###14#E3
	0,80	650	520	9	≤20	17,2	42,5	33	33	FCSK2IL804##FB###14#E3
	1,00	650	650	8	≤20	18,6	42,5	35,5	33,5	FCSK2IL105##FC###14#E3
	1,20	650	780	9	≤20	15,6	42,5	36	24	FCSK2IL125##FD###14#E3
	1,20	650	780	7	≤20	20,6	42,5	45	30	FCSK2IL125##FF###14#E3
	1,50	650	975	8	≤20	17,6	42,5	33	33	FCSK2IL155##FB###14#E3
	1,50	650	975	6	≤20	22,0	42,5	43	42	FCSK2IL155##FE###14#E3
	1,50	455	683	6	≤20	22,0	57,5	43,5	29,5	FCSK2IL155##HG###14#E3
	1,80	650	1170	7	≤20	19,8	42,5	35,5	33,5	FCSK2IL185##FC###14#E3
	1,80	455	819	6	≤20	23,0	57,5	45	30	FCSK2IL185##HH###14#E3
	2,00	455	910	5	≤20	24,0	57,5	45	35	FCSK2IL205##HJ###14#E3
	2,20	650	1430	6	≤20	21,5	42,5	45	30	FCSK2IL225##FF###14#E3
	2,20	455	1001	5	≤20	24,0	57,5	50	35	FCSK2IL225##HL###14#E3
	2,50	455	1138	4	≤20	25,0	57,5	45	45	FCSK2IL255##HK###14#E3
	2,80	650	1820	5	≤20	24,0	42,5	43	42	FCSK2IL285##FE###14#E3
	3,00	455	1365	4	≤20	24,0	57,5	43,5	29,5	FCSK2IL305##HG###14#E3
	3,00	455	1365	4	≤20	25,0	57,5	45	30	FCSK2IL305##HH###14#E3
	3,00	455	1365	4	≤20	26,0	57,5	55	40	FCSK2IL305##HM###14#E3
3,50	455	1592	4	≤20	25,0	57,5	45	35	FCSK2IL355##HJ###14#E3	
4,50	455	2047	3	≤20	27,0	57,5	50	35	FCSK2IL455##HL###14#E3	
5,00	455	2275	3	≤20	27,0	57,5	45	45	FCSK2IL505##HK###14#E3	
5,00	455	2275	2	≤20	29,0	57,5	55	40	FCSK2IL505##HM###14#E3	
1000 V_{DC} 500 V_{AC} 3A	0,65	500	325	10	≤20	11,6	42,5	28	24	FCS3AIL654##FA###14#E3
	1,00	500	500	9	≤20	15,5	42,5	36	24	FCS3AIL105##FD###14#E3
	1,20	500	600	8	≤20	17,5	42,5	33	33	FCS3AIL125##FB###14#E3
	1,40	500	700	7	≤20	18,8	42,5	35,5	33,5	FCS3AIL145##FC###14#E3
	1,80	500	900	6	≤20	21,0	42,5	45	30	FCS3AIL185##FF###14#E3
	2,20	500	1100	5	≤20	23,0	42,5	43	42	FCS3AIL225##FE###14#E3
	2,20	350	770	6	≤20	23,0	57,5	43,5	29,5	FCS3AIL225##HG###14#E3
	2,50	350	875	5	≤20	24,0	57,5	45	30	FCS3AIL255##HH###14#E3
	3,00	350	1050	5	≤20	24,0	57,5	45	35	FCS3AIL305##HJ###14#E3
	3,30	350	1155	4	≤20	25,0	57,5	50	35	FCS3AIL335##HL###14#E3
	3,50	350	1225	4	≤20	25,0	57,5	45	45	FCS3AIL355##HK###14#E3
	4,50	350	1575	4	≤20	28,0	57,5	55	40	FCS3AIL455##HM###14#E3
1200 V_{DC} 600 V_{AC} 3B	0,33	800	264	11	≤20	11,4	42,5	28	24	FCS3BIL334##FA###14#E3
	0,47	800	376	10	≤20	11,5	42,5	28	24	FCS3BIL474##FA###14#E3
	0,50	800	400	10	≤20	15,0	42,5	36	24	FCS3BIL504##FD###14#E3
	0,60	800	480	9	≤20	16,8	42,5	33	33	FCS3BIL604##FB###14#E3
	0,70	800	560	9	≤20	18,4	42,5	35,5	33,5	FCS3BIL704##FC###14#E3
	0,70	800	560	10	≤20	15,3	42,5	36	24	FCS3BIL704##FD###14#E3
	0,80	800	640	9	≤20	17,2	42,5	33	33	FCS3BIL804##FB###14#E3
	0,80	800	640	8	≤20	20,5	42,5	45	30	FCS3BIL804##FF###14#E3
	1,00	800	800	8	≤20	18,6	42,5	35,5	33,5	FCS3BIL105##FC###14#E3
	1,00	800	800	7	≤20	21,0	42,5	43	42	FCS3BIL105##FE###14#E3
	1,00	560	560	6	≤20	22,0	57,5	43,5	29,5	FCS3BIL105##HG###14#E3
	1,20	800	960	7	≤20	20,6	42,5	45	30	FCS3BIL125##FF###14#E3
	1,20	560	672	6	≤20	22,0	57,5	45	30	FCS3BIL125##HH###14#E3

(1) Maximum permissible peak current

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U_{RDC} $\leq 85^{\circ}C$ (V)	C_R (μF)	dV/dt 20 $^{\circ}C$ (V/ μS)	$\bar{i}^{(1)}$ (A)	R_S 20 $^{\circ}C$ 100kHz (m Ω)	L_S 20 $^{\circ}C$ (nH)	I_{max} 70 $^{\circ}C$ 100kHz (A)	W $\pm 1,0$ (mm)	H $\pm 1,0$ (mm)	T $\pm 1,0$ (mm)	ORDER CODE "#" to be defined, see ordering code table
1200 V_{DC} 600 V_{AC} 3B	1,40	560	784	5	≤ 20	23,0	57,5	45	35	FCS3BIL145##HJ###14#E3
	1,50	800	1200	6	≤ 20	22,0	42,5	43	42	FCS3BIL155##FE###14#E3
	1,50	560	840	6	≤ 20	22,0	57,5	43,5	29,5	FCS3BIL155##HG###14#E3
	1,60	560	896	5	≤ 20	23,0	57,5	50	35	FCS3BIL165##HL###14#E3
	1,70	560	952	4	≤ 20	24,0	57,5	45	45	FCS3BIL175##HK###14#E3
	1,80	560	1008	6	≤ 20	23,0	57,5	45	30	FCS3BIL185##HH###14#E3
	2,00	560	1120	5	≤ 20	24,0	57,5	45	35	FCS3BIL205##HJ###14#E3
	2,00	560	1120	4	≤ 20	25,0	57,5	55	40	FCS3BIL205##HM###14#E3
	2,20	560	1232	5	≤ 20	24,0	57,5	50	35	FCS3BIL225##HL###14#E3
	2,50	560	1400	4	≤ 20	25,0	57,5	45	45	FCS3BIL255##HK###14#E3
3,00	560	1680	4	≤ 20	26,0	57,5	55	40	FCS3BIL305##HM###14#E3	
1600 V_{DC} 650 V_{AC} 3C	0,33	800	264	11	≤ 20	11,4	42,5	28	24	FCS3CIL334##FA###14#E3
	0,50	800	400	10	≤ 20	15,0	42,5	36	24	FCS3CIL504##FD###14#E3
	0,60	800	480	9	≤ 20	16,8	42,5	33	33	FCS3CIL604##FB###14#E3
	0,70	800	560	9	≤ 20	18,4	42,5	35,5	33,5	FCS3CIL704##FC###14#E3
	0,80	800	640	8	≤ 20	20,5	42,5	45	30	FCS3CIL804##FF###14#E3
	1,00	800	800	7	≤ 20	21,0	42,5	43	42	FCS3CIL105##FE###14#E3
	1,00	560	560	6	≤ 20	22,0	57,5	43,5	29,5	FCS3CIL105##HG###14#E3
	1,20	560	672	6	≤ 20	22,0	57,5	45	30	FCS3CIL125##HH###14#E3
	1,40	560	784	5	≤ 20	23,0	57,5	45	35	FCS3CIL145##HJ###14#E3
	1,60	560	896	5	≤ 20	23,0	57,5	50	35	FCS3CIL165##HL###14#E3
1,70	560	952	4	≤ 20	24,0	57,5	45	45	FCS3CIL175##HK###14#E3	
2,00	560	1120	4	≤ 20	25,0	57,5	55	40	FCS3CIL205##HM###14#E3	
2000 V_{DC} 700 V_{AC} 3D	0,20	1000	200	11	≤ 20	11,3	42,5	28	24	FCS3DIL204##FA###14#E3
	0,30	1000	300	11	≤ 20	14,9	42,5	36	24	FCS3DIL304##FD###14#E3
	0,39	1000	390	10	≤ 20	16,6	42,5	33	33	FCS3DIL394##FB###14#E3
	0,42	1000	420	9	≤ 20	18,2	42,5	35,5	33,5	FCS3DIL424##FC###14#E3
	0,56	1000	560	9	≤ 20	20,1	42,5	45	30	FCS3DIL564##FF###14#E3
	0,70	1000	700	8	≤ 20	20,0	42,5	43	42	FCS3DIL704##FE###14#E3
	0,75	720	540	8	≤ 20	21,0	57,5	43,5	29,5	FCS3DIL754##HG###14#E3
	0,82	720	590	7	≤ 20	21,0	57,5	45	30	FCS3DIL824##HH###14#E3
	0,90	720	648	6	≤ 20	22,0	57,5	45	35	FCS3DIL904##HJ###14#E3
	1,00	720	720	6	≤ 20	22,0	57,5	50	35	FCS3DIL105##HL###14#E3
1,20	720	864	5	≤ 20	22,0	57,5	45	45	FCS3DIL125##HK###14#E3	
1,40	720	1008	4	≤ 20	24,0	57,5	55	40	FCS3DIL145##HM###14#E3	

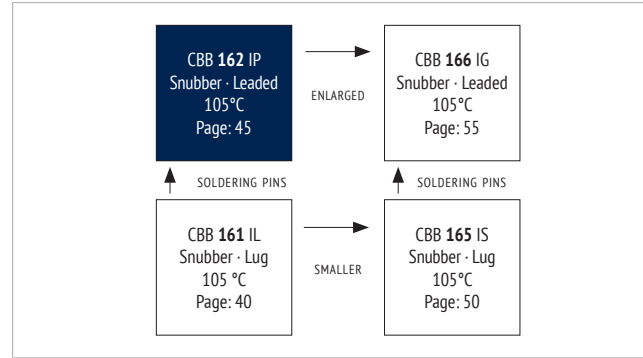
(1) Maximum permissible peak current

SNUBBER

FEATURES

- Very low dissipation factor
- Highest peak pulse capability
- Design for Snubber Application
- Self-healing
- Soldering Terminal

OVERVIEW



PRODUCT



APPLICATIONS

- High pulse and high frequency circuits
- IGBT applications

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\theta_{hotspot} \leq 105$ °C) $\theta_{hotspot} = 85-105$ °C: See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	630 ~ 2.000 V_{DC}
Capacitance Range	0,001 ~ 1,8 μF
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 * U_{RDC}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{AC}$ (20°C, 50 Hz, 10s)
Capacitor Dissipation Factor $\tan \delta$	$\leq 5 * 10^{-4}$ (20 °C, 1 kHz)
Dielectric Dissipation Factor $\tan \delta_e$	$\leq 2 * 10^{-4}$ (20 °C, 1 kHz)
Insulation Resistance R_i °C	$\geq 30.000 M\Omega * \mu F$ (20 °C, 100 V_{DC} , 1 min)
Max. Overvoltage	$1,1 * U_{RDC}$ (30 % of time under load) $1,15 * U_{RDC}$ (30 min. per day) $1,2 * U_{RDC}$ (5 min. per day) $1,3 * U_{RDC}$ (1 min. per day) $1,5 * U_{RDC}$ (max. 30 ms, 100ms per day)
Life Time Expectancy	$\geq 100.000h$, failure rate ≤ 100 FIT (70°C)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant.

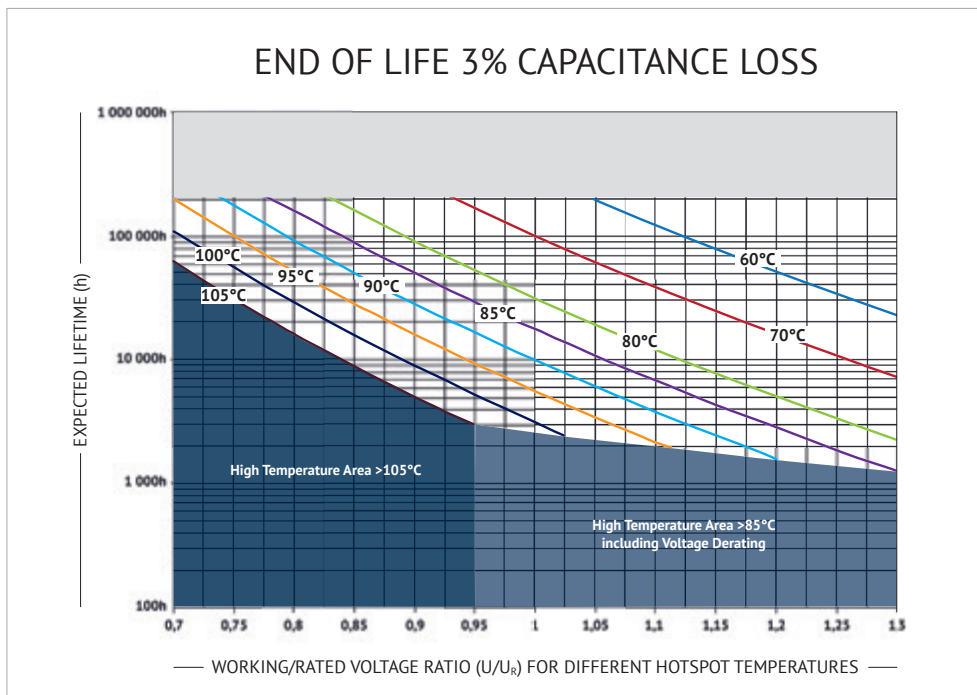
The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

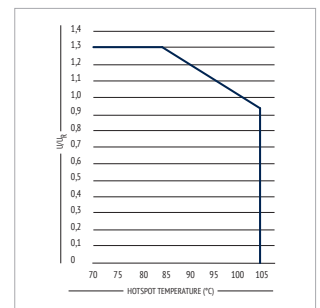
UL94-V0:

Plastic & Compound Mass

LIFETIME

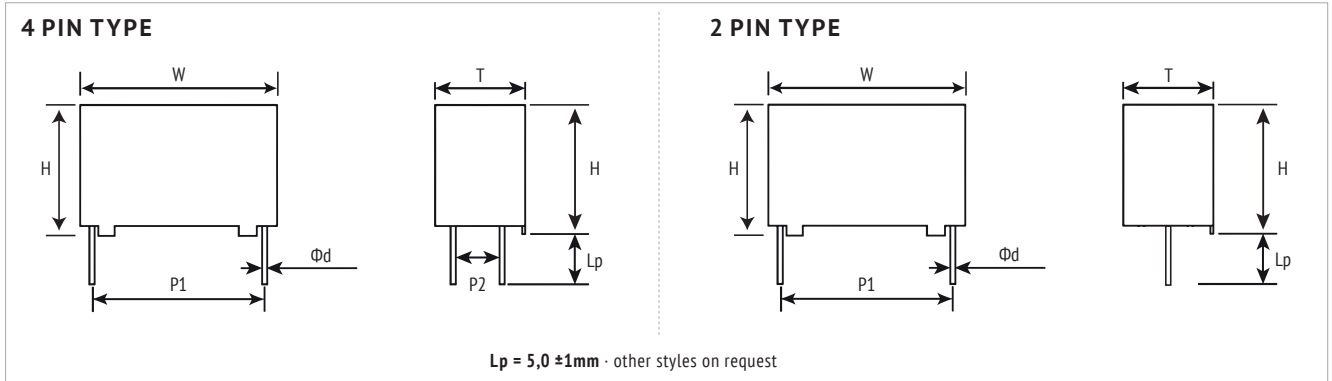


VOLTAGE DERATING

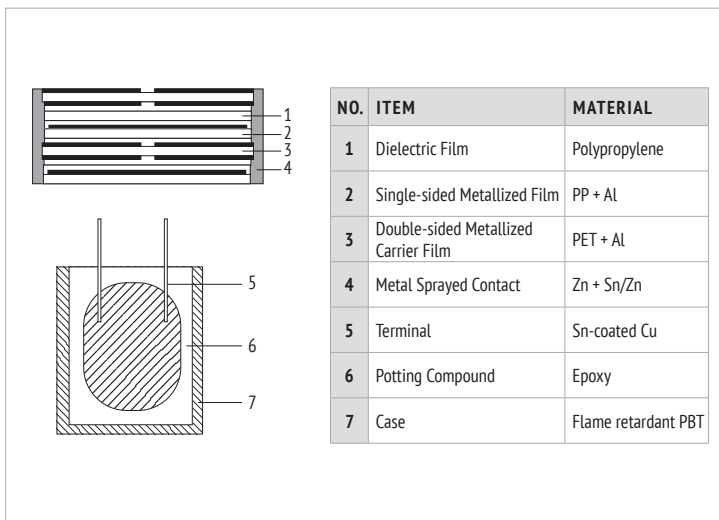


SNUBBER

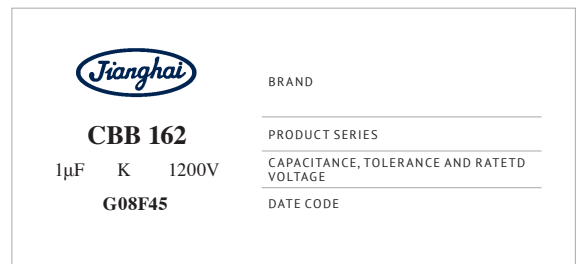
DIMENSIONS



INTERNAL CONSTRUCTION



MARKING



ORDER CODE

FC	S	3B	IP	105	K	A	FA	37	20	C	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (µF)	Capacitance tolerance	Pin Style (mm)	Dimension Code (mm) W x H x T +1,0 +1,0 +1,0	Pitch P ₁ (mm)	Pitch P ₂ (mm)	Leadwire Diameter Ød	For internal use
Film Cap. = FC	Square box = S	630 J2 1000 3A 1200 3B 1600 3C 2000 3D	CBB 162 = IP	0,68 684 0,82 824 1,0 105 1,2 125 2,0 205 5,0 505	±5% J ±10% K	4 Pin Lp = 8mm K 4 Pin Lp = 5mm A 4 Pin Lp = 4,5mm L 4 Pin Lp = 4mm S 4 Pin Lp = 3,5mm J 2 Pin long leads (~ 20mm) C 2 Pin Lp = 5mm B 2 Pin Lp = 4,5mm T 2 Pin Lp = 4,0mm M 2 Pin Lp = 3,5mm U 2 Pin Lp = 3,2mm V	13 x 9 x 4 C2 13 x 11 x 5 C4 13 x 12 x 6 C5 13 x 13 x 7 C8 18 x 11 x 5 E2 18 x 12 x 6 E5 18 x 13,5 x 7,5 E7 18 x 14,5 x 8,5 E8 18 x 16 x 10 EC 18 x 19 x 11 EG 26,5 x 16,5 x 7 B2 26,5 x 17 x 8,5 B3 26,5 x 19 x 10 B4 26,5 x 20 x 11 B5 26,5 x 23 x 13 B6 32 x 20 x 11 I4 32 x 22 x 13 I7 32 x 24,5 x 13 I8 32 x 28 x 14 IC 32 x 33 x 18 IF 32 x 37 x 22 II	10 10 15 15 22,5 22 27,5 27	- 00 5,1 05 10,2 10 12,7 12 20,3 20	0,6 A 0,8 B 1,0 C 1,2 D 0,5 E	

RATINGS

U_R ≤85°C (V)	C_R (μF)	dV/dt (V/μF)	$\hat{i}^{(1)}$ (A)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	ød ±0,05 (mm)	ORDER CODE *# to be defined, see ordering code table
630 V_{DC} 420 V_{AC} J2	0,0039	3000	11,7	13	9	4	10	-	0,6	FCSJ2IP392##C21000AE3
	0,0047	3000	14,1	13	9	4	10	-	0,6	FCSJ2IP472##C21000AE3
	0,0056	3000	16,8	13	9	4	10	-	0,6	FCSJ2IP562##C21000AE3
	0,0068	3000	20,4	13	9	4	10	-	0,6	FCSJ2IP682##C21000AE3
	0,0082	3000	24,6	13	9	4	10	-	0,6	FCSJ2IP822##C21000AE3
	0,010	3000	30,0	13	11	5	10	-	0,6	FCSJ2IP103##C41000AE3
	0,010	2500	25,0	18	11	5	15	-	0,8	FCSJ2IP103##E21500BE3
	0,012	2500	30,0	18	11	5	15	-	0,8	FCSJ2IP123##E21500BE3
	0,012	3000	36,0	13	11	5	10	-	0,6	FCSJ2IP123##C41000AE3
	0,015	2500	37,5	18	11	5	15	-	0,8	FCSJ2IP153##E21500BE3
	0,015	3000	45,0	13	12	6	10	-	0,6	FCSJ2IP153##C51000AE3
	0,018	2500	45,0	18	11	5	15	-	0,8	FCSJ2IP183##E21500BE3
	0,018	3000	54,0	13	12	6	10	-	0,6	FCSJ2IP183##C51000AE3
	0,020	2500	50,0	18	11	5	15	-	0,8	FCSJ2IP203##E21500BE3
	0,020	3000	60,0	13	13	7	10	-	0,6	FCSJ2IP203##C81000AE3
	0,022	3000	66,0	13	13	7	10	-	0,6	FCSJ2IP223##C81000AE3
	0,022	2500	55,0	18	11	5	15	-	0,8	FCSJ2IP223##E21500BE3
	0,027	2500	67,5	18	12	6	15	-	0,8	FCSJ2IP273##E51500BE3
	0,033	2500	82,5	18	12	6	15	-	0,8	FCSJ2IP333##E51500BE3
	0,039	2500	97,5	18	12	6	15	-	0,8	FCSJ2IP393##E51500BE3
	0,047	2500	117	18	13,5	7,5	15	-	0,8	FCSJ2IP473##E71500BE3
	0,056	2500	140	18	13,5	7,5	15	-	0,8	FCSJ2IP563##E71500BE3
	0,068	2500	170	18	14,5	8,5	15	-	0,8	FCSJ2IP683##E81500BE3
	0,082	2500	205	18	16	10	15	-	0,8	FCSJ2IP823##E81500BE3
	0,10	2500	250	18	16	10	15	-	0,8	FCSJ2IP104##EC1500BE3
	0,12	2500	300	18	19	11	15	-	0,8	FCSJ2IP124##EG1500BE3
	0,12	1500	180	26,5	16,5	7	22,5	-	0,8	FCSJ2IP124##B22200BE3
	0,15	1500	225	26,5	17	8,5	22,5	-	0,8	FCSJ2IP154##B32200BE3
	0,18	1500	270	26,5	17	8,5	22,5	-	0,8	FCSJ2IP184##B32200BE3
	0,22	1500	330	26,5	19	10	22,5	-	0,8	FCSJ2IP224##B42200BE3
	0,27	1500	405	26,5	20	11	22,5	-	0,8	FCSJ2IP274##B52200BE3
	0,33	1500	495	26,5	20	11	22,5	-	0,8	FCSJ2IP334##B52200BE3
	0,39	1500	585	26,5	23	13	22,5	-	0,8	FCSJ2IP394##B62200BE3
	0,47	900	423	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP474##I727##BE3
	0,56	900	504	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP564##I727##BE3
	0,68	900	612	32	24,5	13	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP684##I827##BE3
	0,82	900	738	32	28	14	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP824##IC27##BE3
	1,0	900	900	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP105##IF27##BE3
	1,2	900	1080	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP125##IF27##BE3
	1,5	900	1350	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP155##II27##BE3
1,8	900	1620	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCSJ2IP185##II27##BE3	
1000 V_{DC} 500 V_{AC} 3A	0,0039	3000	11,7	13	9	4	10	-	0,6	FCS3AIP392##C21000AE3
	0,0047	3000	14,1	13	9	4	10	-	0,6	FCS3AIP472##C21000AE3
	0,0056	3000	16,8	13	9	4	10	-	0,6	FCS3AIP562##C21000AE3
	0,0068	3000	20,4	13	9	4	10	-	0,6	FCS3AIP682##C21000AE3
	0,0082	3000	24,6	13	9	4	10	-	0,6	FCS3AIP822##C21000AE3
	0,010	2500	25,0	18	11	5	15	-	0,8	FCS3AIP103##E21500BE3
	0,010	3000	30,0	13	11	5	10	-	0,6	FCS3AIP103##C41000AE3
	0,012	2500	30,0	18	11	5	15	-	0,8	FCS3AIP123##E21500BE3
	0,012	3000	36,0	13	11	5	10	-	0,6	FCS3AIP123##C41000AE3
	0,015	2500	37,5	18	11	5	15	-	0,8	FCS3AIP153##E21500BE3
	0,015	3000	45,0	13	12	6	10	-	0,6	FCS3AIP153##C51000AE3
	0,018	2500	45,0	18	11	5	15	-	0,8	FCS3AIP183##E21500BE3
	0,018	3000	54,0	13	12	6	10	-	0,6	FCS3AIP183##C51000AE3
	0,020	2500	50,0	18	11	5	15	-	0,8	FCS3AIP203##E21500BE3
	0,020	3000	60,0	13	13	7	10	-	0,6	FCS3AIP203##C81000AE3
	0,022	3000	66,0	13	13	7	10	-	0,6	FCS3AIP223##C81000AE3
	0,022	2500	55,0	18	11	5	15	-	0,8	FCS3AIP223##E21500BE3
	0,027	2500	67,5	18	12	6	15	-	0,8	FCS3AIP273##E51500BE3
	0,033	2500	82,5	18	12	6	15	-	0,8	FCS3AIP333##E51500BE3
	0,039	2500	97,5	18	12	6	15	-	0,8	FCS3AIP393##E51500BE3
0,047	2500	118	18	13,5	7,5	15	-	0,8	FCS3AIP473##E71500BE3	
0,056	2500	140	18	13,5	7,5	15	-	0,8	FCS3AIP563##E71500BE3	
0,068	2500	170	18	14,5	8,5	15	-	0,8	FCS3AIP683##E81500BE3	

(1) Maximum permissible peak current

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SNUBBER

U_R ≤85°C (V)	C_R (μF)	dV/dt (V/μF)	$\hat{i}^{(1)}$ (A)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	ød ±0,5 (mm)	ORDER CODE *"#" to be defined, see ordering code table
1000 V_{DC} 500 V_{AC} 3A	0,082	2500	205	18	16	10	15	-	0,8	FCS3AIP823##EC1500BE3
	0,10	2500	250	18	16	10	15	-	0,8	FCS3AIP104##EC1500BE3
	0,12	2500	300	18	19	11	15	-	0,8	FCS3AIP124##EG1500BE3
	0,12	1500	180	26,5	16,5	7	22,5	-	0,8	FCS3AIP124##B22200BE3
	0,15	1500	225	26,5	17	8,5	22,5	-	0,8	FCS3AIP154##B32200BE3
	0,18	1500	270	26,5	17	8,5	22,5	-	0,8	FCS3AIP184##B32200BE3
	0,22	1500	330	26,5	19	10	22,5	-	0,8	FCS3AIP224##B42200BE3
	0,27	1500	405	26,5	20	11	22,5	-	0,8	FCS3AIP274##B52200BE3
	0,33	1500	495	26,5	20	11	22,5	-	0,8	FCS3AIP334##B52200BE3
	0,39	1500	585	26,5	23	13	22,5	-	0,8	FCS3AIP394##B62200BE3
	0,47	900	423	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCS3AIP474##I727##BE3
	0,56	900	504	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCS3AIP564##I727##BE3
	0,68	900	612	32	24,5	13	27,5	-5,1/10,2/12,7	0,8	FCS3AIP684##I827##BE3
	0,82	900	738	32	28	14	27,5	-5,1/10,2/12,7	0,8	FCS3AIP824##IC27##BE3
	1,0	900	900	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3AIP105##IF27##BE3
	1,2	900	1080	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3AIP125##IF27##BE3
	1,5	900	1350	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3AIP155##II27##BE3
	1,8	900	1620	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3AIP185##II27##BE3

1200 V_{DC} 600 V_{AC} 3B	0,0012	4800	5,8	13	9	4	10	-	0,6	FCS3BIP122##C21000AE3
	0,0015	4800	7,2	13	9	4	10	-	0,6	FCS3BIP152##C21000AE3
	0,0018	4800	8,6	13	9	4	10	-	0,6	FCS3BIP182##C21000AE3
	0,0022	4800	10,6	13	9	4	10	-	0,6	FCS3BIP222##C21000AE3
	0,0027	4800	13,0	13	9	4	10	-	0,6	FCS3BIP272##C21000AE3
	0,0033	4800	15,8	13	9	4	10	-	0,6	FCS3BIP332##C21000AE3
	0,0039	4800	18,7	13	11	5	10	-	0,6	FCS3BIP392##C41000AE3
	0,0047	4800	22,6	13	11	5	10	-	0,6	FCS3BIP472##C41000AE3
	0,0056	4800	26,9	13	11	5	10	-	0,6	FCS3BIP562##C41000AE3
	0,0068	4800	32,6	13	11	5	10	-	0,6	FCS3BIP682##C41000AE3
	0,0082	4800	39,4	13	11	5	10	-	0,6	FCS3BIP822##C41000AE3
	0,010	3300	33,0	18	11	5	15	-	0,8	FCS3BIP103##E21500BE3
	0,012	3300	39,6	18	11	5	15	-	0,8	FCS3BIP123##E21500BE3
	0,015	3300	49,5	18	11	5	15	-	0,8	FCS3BIP153##E21500BE3
	0,018	3300	59,4	18	11	5	15	-	0,8	FCS3BIP183##E21500BE3
	0,020	3300	66,0	18	11	5	15	-	0,8	FCS3BIP203##E21500BE3
	0,022	3300	72,6	18	12	6	15	-	0,8	FCS3BIP223##E51500BE3
	0,027	3300	89,1	18	13,5	7,5	15	-	0,8	FCS3BIP273##E71500BE3
	0,033	3300	109	18	13,5	7,5	15	-	0,8	FCS3BIP333##E71500BE3
	0,039	3300	129	18	14,5	8,5	15	-	0,8	FCS3BIP393##E81500BE3
	0,047	2200	103	26,5	16,5	7	22,5	-	0,8	FCS3BIP473##B22200BE3
	0,056	2200	123	26,5	16,5	7	22,5	-	0,8	FCS3BIP563##B22200BE3
	0,068	2200	150	26,5	17	8,5	22,5	-	0,8	FCS3BIP683##B32200BE3
	0,082	2200	180	26,5	19	10	22,5	-	0,8	FCS3BIP823##B42200BE3
	0,10	2200	220	26,5	19	10	22,5	-	0,8	FCS3BIP104##B42200BE3
	0,12	2200	264	26,5	20	11	22,5	-	0,8	FCS3BIP124##B52200BE3
	0,15	2200	330	26,5	23	13	22,5	-	0,8	FCS3BIP154##B62200BE3
	0,18	1000	180	32	20	11	27,5	-5,1/10,2/12,7	0,8	FCS3BIP184##I427##BE3
	0,22	1000	220	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCS3BIP224##I727##BE3
	0,27	1000	270	32	24,5	13	27,5	-5,1/10,2/12,7	0,8	FCS3BIP274##I827##BE3
	0,33	1000	330	32	28	14	27,5	-5,1/10,2/12,7	0,8	FCS3BIP334##IC27##BE3
	0,39	1000	390	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3BIP394##IF27##BE3
	0,56	1000	560	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3BIP564##II27##BE3
	0,68	1000	680	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3BIP684##II27##BE3

1600 V_{DC} 650 V_{AC} 3C	0,0056	6000	33,6	18	11	5	15	-	0,8	FCS3CIP562##E21500BE3
	0,0068	6000	40,8	18	11	5	15	-	0,8	FCS3CIP682##E21500BE3
	0,0082	6000	49,2	18	11	5	15	-	0,8	FCS3CIP822##E21500BE3
	0,010	6000	60,0	18	11	5	15	-	0,8	FCS3CIP103##E21500BE3
	0,012	6000	72,0	18	12	6	15	-	0,8	FCS3CIP123##E51500BE3
	0,015	6000	90,0	18	12	6	15	-	0,8	FCS3CIP153##E51500BE3
	0,018	6000	108	18	13,5	7,5	15	-	0,8	FCS3CIP183##E71500BE3
	0,022	6000	132	18	13,5	7,5	15	-	0,8	FCS3CIP223##E71500BE3
	0,027	6000	162	18	14,5	8,5	15	-	0,8	FCS3CIP273##E81500BE3
	0,033	6000	198	18	14,5	8,5	15	-	0,8	FCS3CIP333##E81500BE3
	0,039	3000	117	26,5	16,5	7	22,5	-	0,8	FCS3CIP393##B22200BE3

(1) Maximum permissible peak current

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U_R ≤85°C (V)	C_R (μF)	dV/dt (V/μF)	$\hat{i}^{(1)}$ (A)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	ød ±0,05 (mm)	ORDER CODE *"#" to be defined, see ordering code table
1600 V_{DC} 650 V_{AC} 3C	0,047	3000	141	26,5	16,5	7	22,5	-	0,8	FCS3CIP473##B22200BE3
	0,056	3000	168	26,5	17	8,5	22,5	-	0,8	FCS3CIP563##B32200BE3
	0,068	3000	204	26,5	19	10	22,5	-	0,8	FCS3CIP683##B42200BE3
	0,082	3000	246	26,5	19	10	22,5	-	0,8	FCS3CIP823##B42200BE3
	0,10	3000	300	26,5	20	11	22,5	-	0,8	FCS3CIP104##B52200BE3
	0,12	2000	240	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCS3CIP124##I727##BE3
	0,15	2000	300	32	24,5	13	27,5	-5,1/10,2/12,7	0,8	FCS3CIP154##I827##BE3
	0,18	2000	360	32	28	14	27,5	-5,1/10,2/12,7	0,8	FCS3CIP184##IC27##BE3
	0,22	2000	440	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3CIP224##IF27##BE3
	0,27	2000	540	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3CIP274##IF27##BE3
	0,33	2000	660	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3CIP334##IF27##BE3
	0,39	2000	780	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3CIP394##II27##BE3
	0,47	2000	940	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3CIP474##II27##BE3
	2000 V_{DC} 700 V_{AC} 3D	0,0010	9500	9,5	18	11	5	15	-	0,8
0,0012		9500	11,4	18	11	5	15	-	0,8	FCS3DIP122##E21500BE3
0,0015		9500	14,3	18	11	5	15	-	0,8	FCS3DIP152##E21500BE3
0,0018		9500	17,1	18	11	5	15	-	0,8	FCS3DIP182##E21500BE3
0,0022		9500	20,9	18	11	5	15	-	0,8	FCS3DIP222##E21500BE3
0,0027		9500	25,7	18	11	5	15	-	0,8	FCS3DIP272##E21500BE3
0,0033		9500	31,4	18	11	5	15	-	0,8	FCS3DIP332##E21500BE3
0,0039		9500	37,1	18	11	5	15	-	0,8	FCS3DIP392##E21500BE3
0,0047		9500	44,7	18	11	5	15	-	0,8	FCS3DIP472##E21500BE3
0,0056		9500	53,2	18	12	6	15	-	0,8	FCS3DIP562##E51500BE3
0,0068		9500	64,6	18	12	6	15	-	0,8	FCS3DIP682##E51500BE3
0,0082		9500	77,9	18	12	6	15	-	0,8	FCS3DIP822##E51500BE3
0,010		9500	95,0	18	13,5	7,5	15	-	0,8	FCS3DIP103##E71500BE3
0,012		9500	114	18	14,5	8,5	15	-	0,8	FCS3DIP123##E81500BE3
0,015		9500	143	18	14,5	8,5	15	-	0,8	FCS3DIP153##E81500BE3
0,018		9500	171	18	16	10	15	-	0,8	FCS3DIP183##EC1500BE3
0,022		3500	77,0	26,5	16,5	7	22,5	-	0,8	FCS3DIP223##B22200BE3
0,027		3500	94,5	26,5	16,5	7	22,5	-	0,8	FCS3DIP273##B22200BE3
0,033		3500	116	26,5	17	8,5	22,5	-	0,8	FCS3DIP333##B32200BE3
0,039		3500	137	26,5	19	10	22,5	-	0,8	FCS3DIP393##B42200BE3
0,047		3500	165	26,5	19	10	22,5	-	0,8	FCS3DIP473##B42200BE3
0,056		3500	196	26,5	20	11	22,5	-	0,8	FCS3DIP563##B52200BE3
0,068		2500	170	32	22	13	27,5	-5,1/10,2/12,7	0,8	FCS3DIP683##I727##BE3
0,082		2500	205	32	24,5	13	27,5	-5,1/10,2/12,7	0,8	FCS3DIP823##I827##BE3
0,10		2500	250	32	28	14	27,5	-5,1/10,2/12,7	0,8	FCS3DIP104##IC27##BE3
0,12		2500	300	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3DIP124##IF27##BE3
0,15		2500	375	32	33	18	27,5	-5,1/10,2/12,7	0,8	FCS3DIP154##IF27##BE3
0,18		2500	450	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3DIP184##II27##BE3
0,22	2500	550	32	37	22	27,5	-5,1/10,2/12,7	0,8	FCS3DIP224##II27##BE3	

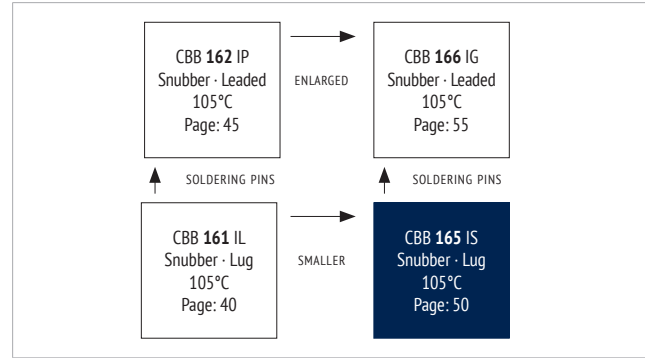
(1) Maximum permissible peak current

SNUBBER

FEATURES

- Very low dissipation factor
- High peak pulse capability
- Plates for direct IGBT connection
- Self-healing
- 105°C

OVERVIEW



PRODUCT



APPLICATIONS

- High pulse and high frequency circuits

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\Theta_{hotspot} \leq 105$ °C) $\Theta_{hotspot} = 85-105$ °C; See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	850 ~ 3.000 V _{DC}
Capacitance Range	0,4 ~ 8,0 μ F
Capacitance Tolerance	± 10 % (K), ± 5 % (I)
Voltage between Terminals U_{TT}	$1,5 * U_{RDC}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	3.000 V _{AC} (20°C, 50 Hz, 10s)
Capacitor Dissipation Factor $\tan \delta$	$\leq 5 * 10^{-4}$ (20 °C, 1 kHz)
Dielectric Dissipation Factor $\tan \delta_d$	$\leq 2 * 10^{-4}$ (20 °C, 1 kHz)
Series Inductance L_s (typ.)	≤ 20 nH (20 °C)
Insulation Resistance $R_i * C$	≥ 30.000 M $\Omega * \mu$ F (20 °C, 100 V _{DC} , 1 min)
Max. Overvoltage	1,1 * U_{RDC} (30 % of time under load) 1,15 * U_{RDC} (30 min. per day) 1,2 * U_{RDC} (5 min. per day) 1,3 * U_{RDC} (1 min. per day) 1,5 * U_{RDC} (max. 30 ms, 100ms per day)
Life Time Expectancy	≥ 100.000 h, failure rate ≤ 100 FIT (70°C)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

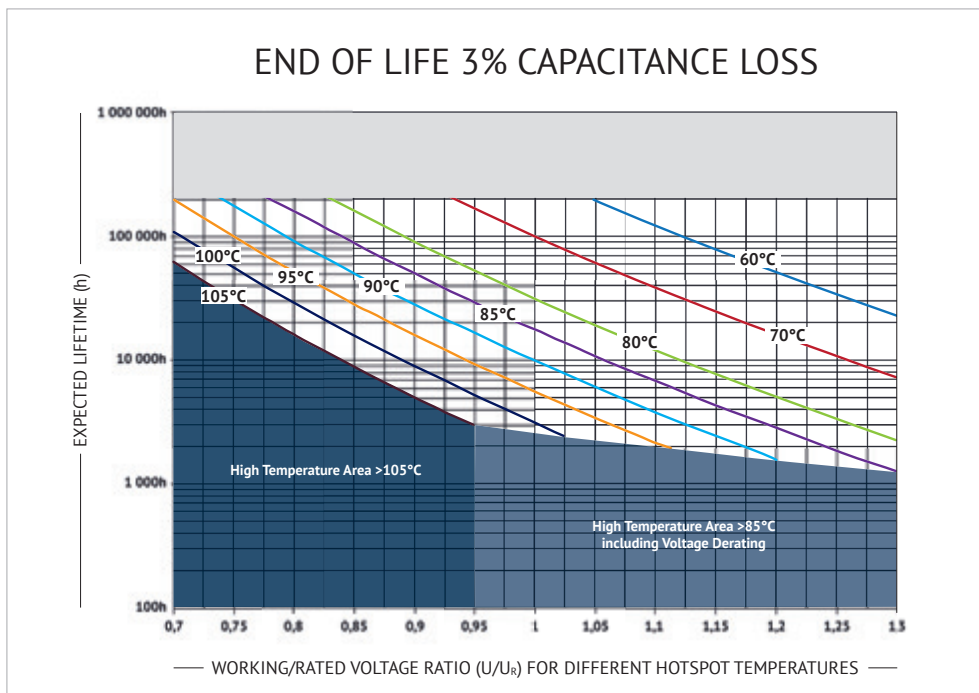
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

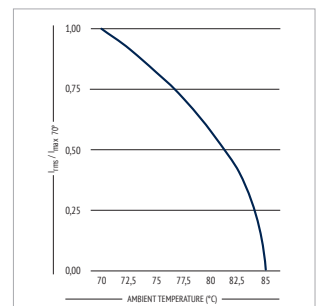
APPROVALS

UL94-V0:
Plastic & Compound Mass

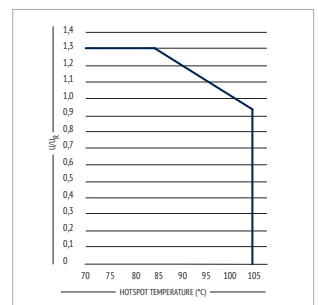
LIFETIME



CURRENT DERATING

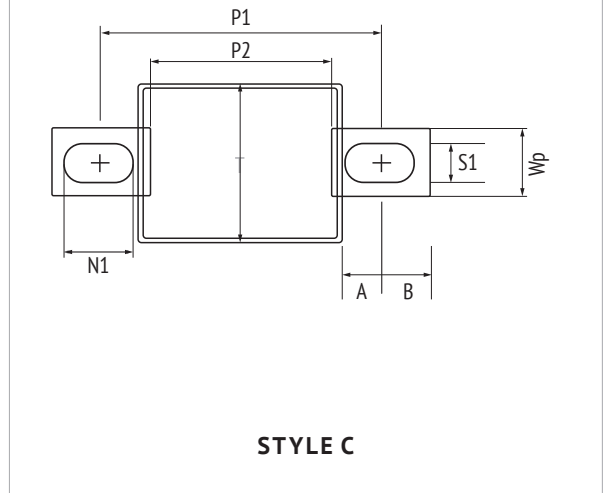
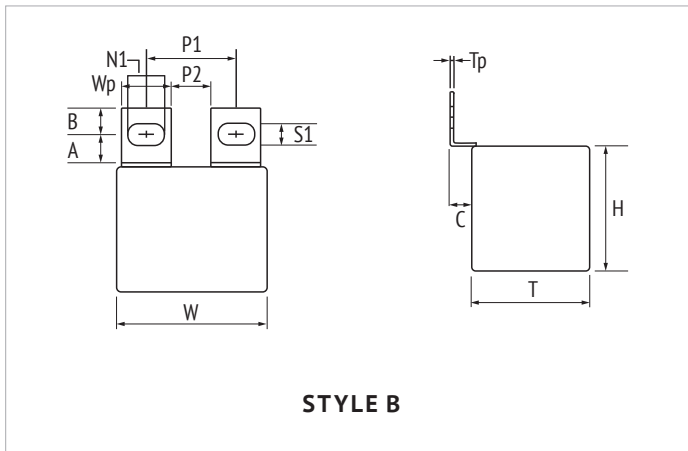
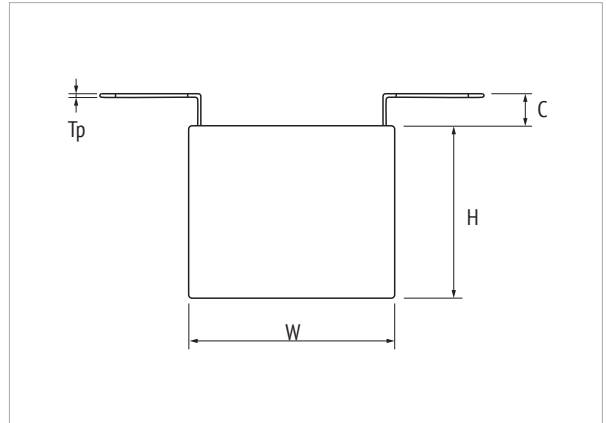
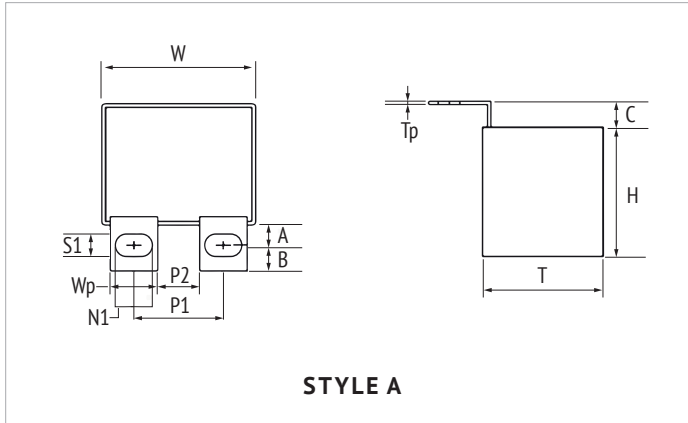


VOLTAGE DERATING



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■ DIMENSIONS



Terminal Style	Length of Case $W \pm 1,0$ (mm)	Mounting Hole Pitch $P1 \pm 0,5$ (mm)	Gap between Terminals $P2 \pm 0,5$ (mm)	Width Terminal Plate $Wp \pm 0,3$ (mm)	Thickness Terminal $Tp \pm 0,1$ (mm)	Distance of Terminal $C \pm 1$ (mm)	Width of Hole $S1 \pm 0,1$ (mm)	Length of Hole $N1 \pm 0,3$ (mm)	Position of Hole $A \pm 0,2$ (mm)	Distance of Hole $B \pm 0,2$ (mm)
Style A/B	42,5	24,0	10,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style A/B	42,5	26,0	12,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style A/B	57,5	24,0	10,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style A/B	57,5	37,0	23,0	14,0	1,0	6,0	M6: 6,5 M8: 8,5	M6: 8,5 M8: 10,5	7,0	7,0
Style C	42,5	60,0	38,0	14,0	1,0	6,0	M8: 8,2	M8: 14	8,5	10,0
Style C	57,5	75,0	53,0	14,0	1,0	6,0	M8: 8,2	M8: 14	8,5	10,0

SNUBBER

INTERNAL CONSTRUCTION

NO.	ITEM	MATERIAL
1	Single-sided Metallized Film	PP + Al
2	Metal Sprayed Contact	Zn + Sn/Zn
3	Terminal	Sn-coated Cu
4	Potting Compound	Epoxy
5	Case	Flame retardant PBT

MARKING

BRAND: Jianghai

PRODUCT SERIES: CBB 165

CAPACITANCE, TOLERANCE AND RATED VOLTAGE: 1µF K 1200V

DATE CODE: G05F45

ORDER CODE

FC	S	3B	IL	105	K	A	FA	60	12	16	1	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (µF)	Capacitance tolerance	Plate Style (mm)	Dimension Code (mm)	Pitch P ₁ (mm)	Gap P ₂ (mm)	Width of plates Wp (mm)	Hole Shape	For internal use
Film Cap. = FC	Square box = S	630 2J	CBB 165 = IS	0,22 224	±5% J	Style A A	42,5 x 28 x 24 FA	24 24	10 10	14 14	Circular M6	0
		700 2Q		0,33 334	±10% K	Style B B	42,5 x 33 x 33 FB	26 26	12 12		Oval M6: 6,5x8,5	1
		850 K2		0,47 474		Style C C	42,5 x 35,5 x 33,5 FC	37 37	23 23		Circular M8	2
		1000 3A		0,68 684			42,5 x 36 x 24 FD	60 60	38 38		Oval M8: 8,5x10,5	3
		1200 3B		0,82 824			42,5 x 43 x 42 FE	75 75	53 53		Oval M6: 6,5x10,5	7
		1600 3C		1,0 105			42,5 x 45 x 30 FF				Oval 9x12	5
		2000 3D		1,2 125			57,5 x 43,5 x 29,5 HG				Circular ø5,5	A
		2500 3E		1,5 155			57,5 x 45 x 30 HH				Circular ø7,0	C
		3000 3F		2,0 205			57,5 x 45 x 35 HJ				Circular ø5,0	E
				2,2 225			57,5 x 45 x 45 HK				Oval 8,5x14,5	D
				2,5 255			57,5 x 50 x 35 HL					
				3,0 305			57,5 x 55 x 40 HM					
				3,3 335								
				4,0 405								
				4,7 475								
				5,0 505								
				6,0 605								
				6,8 685								
				10,0 106								

SNUBBER

RATINGS

U_R	C_R	dV/dt	$\hat{i}^{(1)}$	R_S	L_S	I_{max}	W	H	T	ORDER CODE
≤85°C		20°C		20°C	20°C	70°C	±1,0	±1,0	±1,0	
(V)	(µF)	(V/µS)	(A)	(mΩ)	(nH)	(A)	(mm)	(mm)	(mm)	"*" to be defined, see ordering code table
850 V_{DC} 450 V_{AC} K2	1,20	375	450	10	≤20	11,8	42,5	28	24	FCSK2IS125##FA###14#E3
	2,00	375	750	9	≤20	15,6	42,5	36	24	FCSK2IS205##FD###14#E3
	2,50	375	937	8	≤20	17,6	42,5	33	33	FCSK2IS255##FB###14#E3
	2,80	375	1050	7	≤20	19,8	42,5	35,5	33,5	FCSK2IS285##FC###14#E3
	3,30	375	1237	6	≤20	21,5	42,5	45	30	FCSK2IS335##FF###14#E3
	4,00	375	1500	5	≤20	24,0	42,5	43	42	FCSK2IS405##FE###14#E3
	4,50	225	1012	5	≤20	24,0	57,5	43,5	29,5	FCSK2IS455##HG###14#E3
	4,80	225	1080	4	≤20	25,0	57,5	45	30	FCSK2IS485##HH###14#E3
	5,50	225	1237	4	≤20	25,0	57,5	45	35	FCSK2IS555##HJ###14#E3
	6,50	225	1462	3	≤20	26,0	57,5	50	35	FCSK2IS655##HL###14#E3
7,00	225	1575	3	≤20	26,0	57,5	45	45	FCSK2IS705##HK###14#E3	
8,00	225	1800	3	≤20	29,0	57,5	55	40	FCSK2IS805##HM###14#E3	
1000 V_{DC} 500 V_{AC} 3A	1,00	425	425	10	≤20	11,6	42,5	28	24	FCS3AIS105##FA###14#E3
	1,50	425	637	9	≤20	15,5	42,5	36	24	FCS3AIS155##FD###14#E3
	1,80	425	765	8	≤20	17,5	42,5	33	33	FCS3AIS185##FB###14#E3
	2,00	425	850	7	≤20	18,8	42,5	35,5	33,5	FCS3AIS205##FC###14#E3
	2,50	425	1062	6	≤20	21,0	42,5	45	30	FCS3AIS255##FF###14#E3
	3,00	425	1275	5	≤20	23,0	42,5	43	42	FCS3AIS305##FE###14#E3
	3,30	250	825	6	≤20	23,0	57,5	43,5	29,5	FCS3AIS335##HG###14#E3
	3,50	250	875	5	≤20	24,0	57,5	45	30	FCS3AIS355##HH###14#E3
	4,20	250	1050	5	≤20	24,0	57,5	45	35	FCS3AIS425##HJ###14#E3
	4,80	250	1200	4	≤20	25,0	57,5	50	35	FCS3AIS485##HL###14#E3
5,00	250	1250	4	≤20	25,0	57,5	45	45	FCS3AIS505##HK###14#E3	
6,00	250	1500	4	≤20	28,0	57,5	55	40	FCS3AIS605##HM###14#E3	
1200 V_{DC} 600 V_{AC} 3B	0,68	475	323	10	≤20	11,5	42,5	28	24	FCS3BIS684##FA###14#E3
	1,00	475	475	10	≤20	15,4	42,5	36	24	FCS3BIS105##FD###14#E3
	1,30	475	617	8	≤20	18,6	42,5	35,5	33,5	FCS3BIS135##FC###14#E3
	1,60	475	760	7	≤20	20,6	42,5	45	30	FCS3BIS165##FF###14#E3
	2,00	475	950	7	≤20	22,0	42,5	43	42	FCS3BIS205##FE###14#E3
	2,20	300	660	6	≤20	22,0	57,5	43,5	29,5	FCS3BIS225##HG###14#E3
	2,50	300	750	6	≤20	23,0	57,5	45	30	FCS3BIS255##HH###14#E3
	2,80	300	840	6	≤20	24,0	57,5	45	35	FCS3BIS285##HJ###14#E3
	3,30	300	990	5	≤20	24,0	57,5	50	35	FCS3BIS335##HL###14#E3
	3,50	300	1050	5	≤20	25,0	57,5	45	45	FCS3BIS355##HK###14#E3
4,00	300	1200	5	≤20	26,0	57,5	55	40	FCS3BIS405##HM###14#E3	
1600 V_{DC} 650 V_{AC} 3C	0,45	625	281	11	≤20	11,4	42,5	28	24	FCS3CIS454##FA###14#E3
	0,60	625	375	10	≤20	15,2	42,5	36	24	FCS3CIS604##FD###14#E3
	0,70	625	437	10	≤20	17,0	42,5	33	33	FCS3CIS704##FB###14#E3
	0,85	625	531	9	≤20	18,4	42,5	35,5	33,5	FCS3CIS854##FC###14#E3
	1,00	625	625	8	≤20	20,5	42,5	45	30	FCS3CIS105##FF###14#E3
	1,30	625	812	7	≤20	21,0	42,5	43	42	FCS3CIS135##FE###14#E3
	1,50	375	562	6	≤20	22,0	57,5	43,5	29,5	FCS3CIS155##HG###14#E3
	1,60	375	600	6	≤20	22,0	57,5	45	30	FCS3CIS165##HH###14#E3
	1,80	375	675	5	≤20	23,0	57,5	45	35	FCS3CIS185##HJ###14#E3
	2,00	375	750	5	≤20	24,0	57,5	50	35	FCS3CIS205##HL###14#E3
2,20	375	825	4	≤20	24,0	57,5	45	45	FCS3CIS225##HK###14#E3	
2,50	375	937	4	≤20	25,0	57,5	55	40	FCS3CIS255##HM###14#E3	
2000 V_{DC} 700 V_{AC} 3D	1,00	425	425	5	≤20	22,0	57,5	43,5	29,5	FCS3DIS105##HG###14#E3
	1,10	425	467	5	≤20	23,0	57,5	45	30	FCS3DIS115##HH###14#E3
	1,30	425	552	4	≤20	23,0	57,5	45	35	FCS3DIS135##HJ###14#E3
	1,50	425	637	4	≤20	24,0	57,5	50	35	FCS3DIS155##HL###14#E3
	1,70	425	722	4	≤20	25,0	57,5	45	45	FCS3DIS175##HK###14#E3
	1,90	425	807	3	≤20	25,0	57,5	55	40	FCS3DIS195##HM###14#E3
2500 V_{DC} 725 V_{AC} 3E	0,55	600	330	5	≤20	21,0	57,5	43,5	29,5	FCS3EIS554##HG###14#E3
	0,60	600	360	5	≤20	21,0	57,5	45	30	FCS3EIS604##HH###14#E3
	0,75	600	450	4	≤20	23,0	57,5	45	35	FCS3EIS754##HJ###14#E3
	0,80	600	480	4	≤20	23,0	57,5	50	35	FCS3EIS804##HL###14#E3
	0,90	600	540	3	≤20	24,0	57,5	45	45	FCS3EIS904##HK###14#E3
	1,00	600	600	3	≤20	25,0	57,5	55	40	FCS3EIS105##HM###14#E3

(1) Maximum permissible peak current

>>

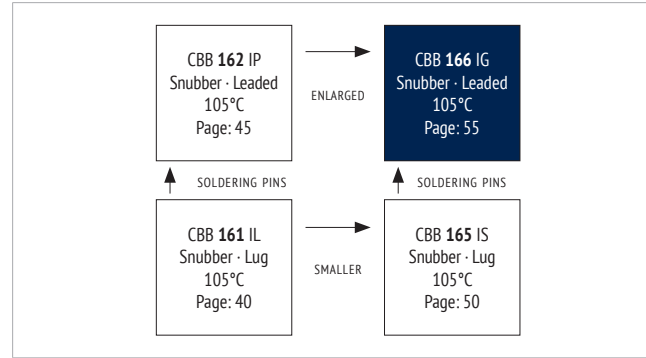
U_R	C_R	dV/dt	$\hat{i}^{(1)}$	R_S	L_S	I_{max}	W	H	T	ORDER CODE
$\leq 85^\circ\text{C}$		20°C		20°C	20°C	70°C	$\pm 1,0$	$\pm 1,0$	$\pm 1,0$	"#" to be defined, see ordering code table
(V)	(μF)	(V/ μS)	(A)	(m Ω)	(nH)	(A)	(mm)	(mm)	(mm)	
3000 V _{DC} 750 V _{AC} 3L	0,40	600	240	6	≤ 20	21,0	57,5	43,5	29,5	FCS3LIS404##HG###14#E3
	0,40	600	240	6	≤ 20	21,0	57,5	45	30	FCS3LIS404##HH###14#E3
	0,50	600	300	5	≤ 20	22,0	57,5	45	35	FCS3LIS504##HJ###14#E3
	0,55	600	330	5	≤ 20	23,0	57,5	50	35	FCS3LIS54##HL###14#E3
	0,65	600	390	4	≤ 20	23,0	57,5	45	45	FCS3LIS654##HK###14#E3
	0,70	600	420	4	≤ 20	24,0	57,5	55	40	FCS3LIS704##HM###14#E3

(1) Maximum permissible peak current

FEATURES

- Very low dissipation factor
- Highest peak pulse capability
- Design for Snubber Application
- Self-healing
- Soldering Terminal

OVERVIEW



PRODUCT



APPLICATIONS

- High pulse and high frequency circuits
- IGBT applications

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\Theta_{\text{hotspot}} \leq 105 \text{ °C}$) $\Theta_{\text{hotspot}} = 85\text{-}105\text{ °C}$: See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	850 ~ 2.000 V_{DC}
Capacitance Range	0,033 ~ 5,0 μF
Capacitance Tolerance	$\pm 10 \%$ (K), $\pm 5 \%$ (I)
Voltage between Terminals U_{TT}	$1,5 * U_{\text{RDC}}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{\text{AC}}$ (20°C, 50 Hz, 10s)
Capacitor Dissipation Factor $\tan \delta$	$\leq 1 * 10^{-3}$ (20 °C, 1 kHz)
Dielectric Dissipation Factor $\tan \delta_e$	$\leq 2 * 10^{-4}$ (20 °C, 1 kHz)
Insulation Resistance $R_i \cdot C$	$\geq 30.000 \text{ M}\Omega * \mu\text{F}$ (20 °C, 100 V_{DC} , 1 min)
Max. Overvoltage	$1,1 * U_{\text{RDC}}$ (30 % of time under load) $1,15 * U_{\text{RDC}}$ (30 min. per day) $1,2 * U_{\text{RDC}}$ (5 min. per day) $1,3 * U_{\text{RDC}}$ (1 min. per day) $1,5 * U_{\text{RDC}}$ (max. 30 ms, 100ms per day)
Life Time Expectancy	$\geq 100.000\text{h}$, failure rate $\leq 100 \text{ FIT}$ (70°C)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

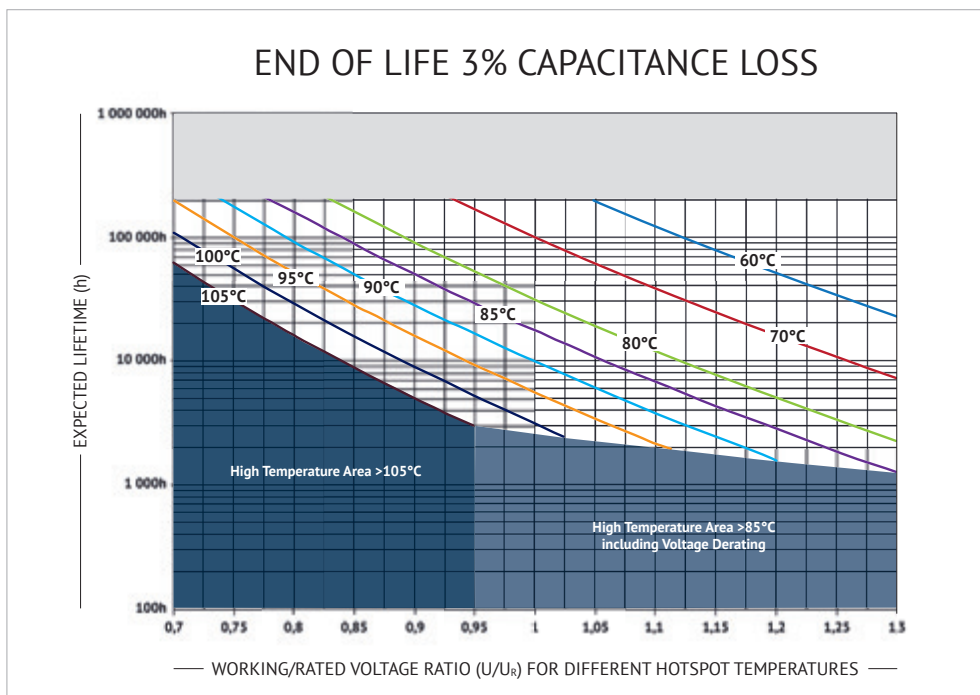
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

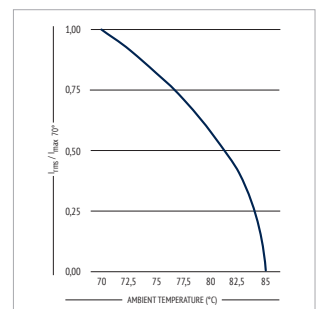
APPROVALS

UL94-V0:
Plastic & Compound Mass

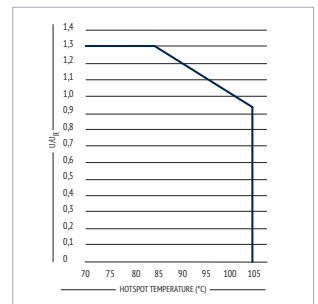
LIFETIME



CURRENT DERATING

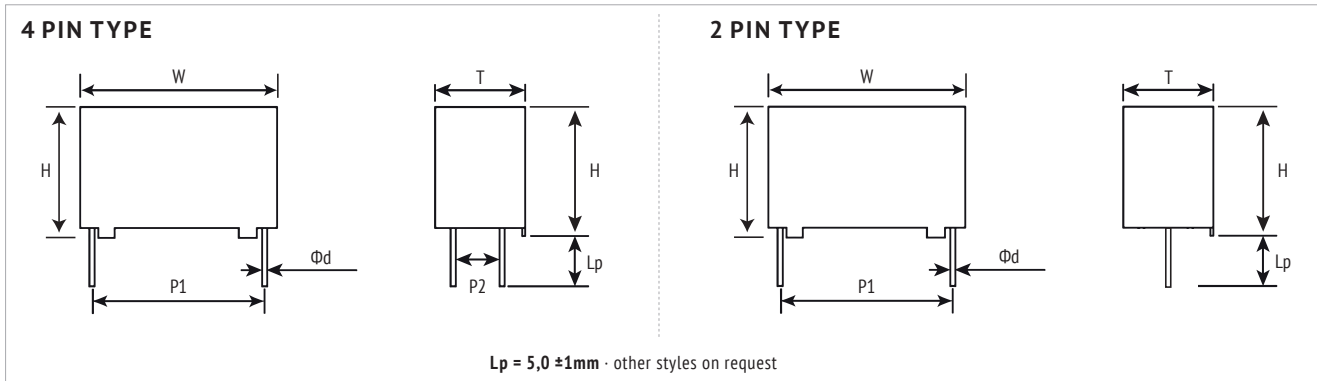


VOLTAGE DERATING

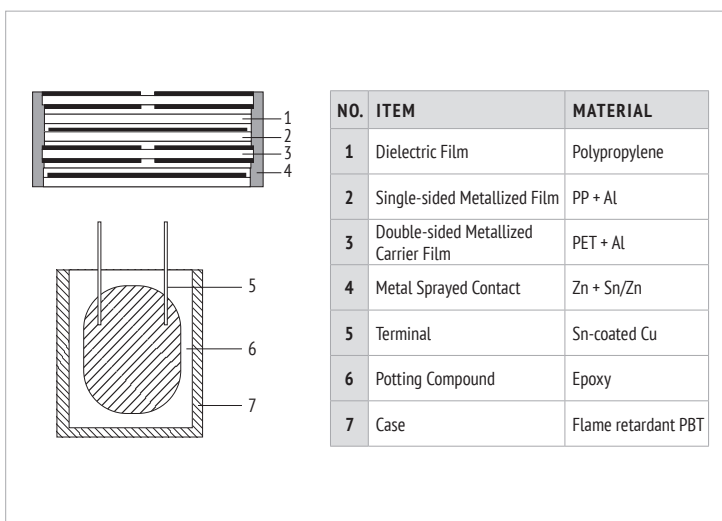


SNUBBER

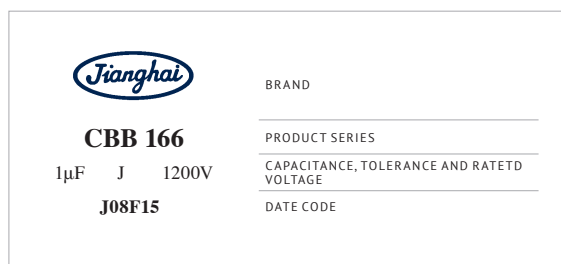
DIMENSIONS



INTERNAL CONSTRUCTION



MARKING



SNUBBER

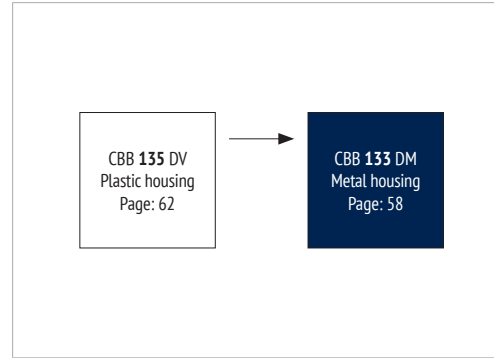
ORDER CODE

FC	S	3B	IG	105	K	A	FA	37	20	C	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (μF)	Capacitance tolerance	Pin Style (mm)	Dimension Code (mm) W x H x T +1,0 +1,0 +1,0	Pitch P ₁ (mm)	Pitch P ₂ (mm)	Leadwire Diameter Ød	For internal use
Film Cap. = FC	Square box = S	850 K2 1000 3A 1200 3B 1600 3C 2000 3D	CBB 166 = IG	0,033 333 0,68 684 0,82 824 1,0 105 1,2 125 2,0 205 5,0 505	±5% J ±10% K	4 Pin Lp = 8mm K 4 Pin Lp = 5mm A 4 Pin Lp = 4,5mm L 4 Pin Lp = 4mm S 4 Pin Lp = 3,5mm J 2 Pin long leads (~ 20mm) C 2 Pin Lp = 5mm B 2 Pin Lp = 4,5mm T 2 Pin Lp = 4,0mm M 2 Pin Lp = 3,5mm U 2 Pin Lp = 3,2mm V	32 x 20 x 11 I4 32 x 22 x 13 I7 32 x 24,5 x 13 I8 32 x 28 x 14 IC 32 x 33 x 18 IF 32 x 37 x 22 II 42,5 x 37 x 28 F1 42,5 x 40 x 20 F2 42,5 x 32 x 19 F5 42,5 x 44 x 24 F9 42,5 x 45 x 30 FF 57,5 x 45 x 30 HH 57,5 x 50 x 35 HL	27,5 27 37,5 37 52,5 52	10,2 10 20,3 20 - 00	0,6 A 0,8 B 1,0 C 1,2 D 0,5 E	

FEATURES

- Customer Specific Designs
- High ripple current capability
- Self-healing
- Long lifetime
- Metal Case, fire retardant resin

OVERVIEW



PRODUCT



APPLICATIONS

- High power frequency converters
- Electric and hybrid electric vehicles, Traction and Trains

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/85/56 (IEC 61071)
Operating Temperature	-40 ~ +70 °C ($\theta_{\text{hotspot}} \leq 85$ °C)
Storage Temperature	-40 ~ +85 °C
Rated Voltage U_{RDC}	750 ~ 3.000 V_{DC}
Capacitance Range	500 ~ 65.000 μF
Capacitance Tolerance	± 10 % (K), ± 5 % (J)
Voltage between Terminals U_{TT}	$1,5 * U_{\text{RDC}}$ (20°C, 10s)
Voltage between Terminals & Case U_{TC}	$\geq 3.000 V_{\text{AC}}$ (20°C, 50 Hz, 10s)
Max. Overvoltage	$1,1 * U_{\text{RDC}}$ (30 % of time under load) $1,15 * U_{\text{RDC}}$ (30 min. per day) $1,2 * U_{\text{RDC}}$ (5 min. per day) $1,3 * U_{\text{RDC}}$ (1 min. per day) $1,5 * U_{\text{RDC}}$ (max. 30 ms, 100ms per day)
Insulation Resistance R_i , °C	$\geq 5.000 M\Omega * \mu\text{F}$ (20 °C, 100 V_{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_0$	$\leq 2 * 10^{-4}$ (20 °C, 100 Hz)
Life Time Expectancy	100.000h, failure rate ≤ 100 FIT ($\theta_{\text{hotspot}} \leq 70^\circ\text{C}, U_{\text{RDC}}$)
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

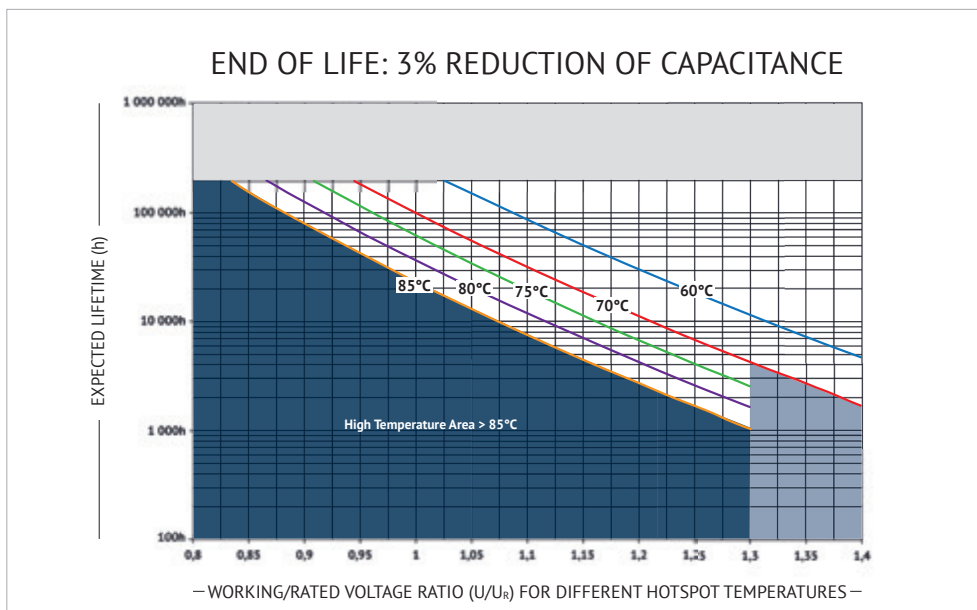
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

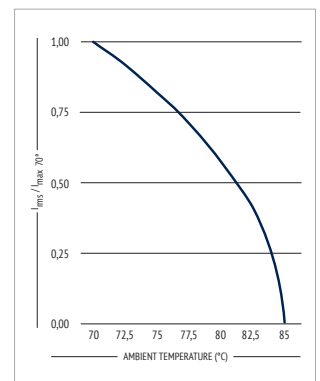
APPROVALS

- UL94-V0:**
Plastic & Compound Mass
- UL810:**
CZDS2.E227010 (Construction)
(except customized)

LIFETIME

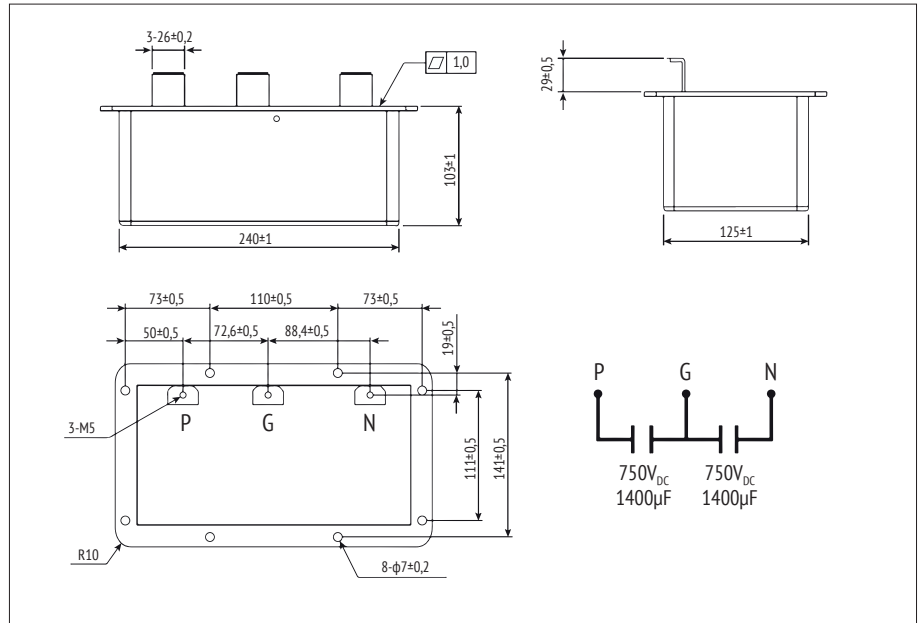


CURRENT DERATING

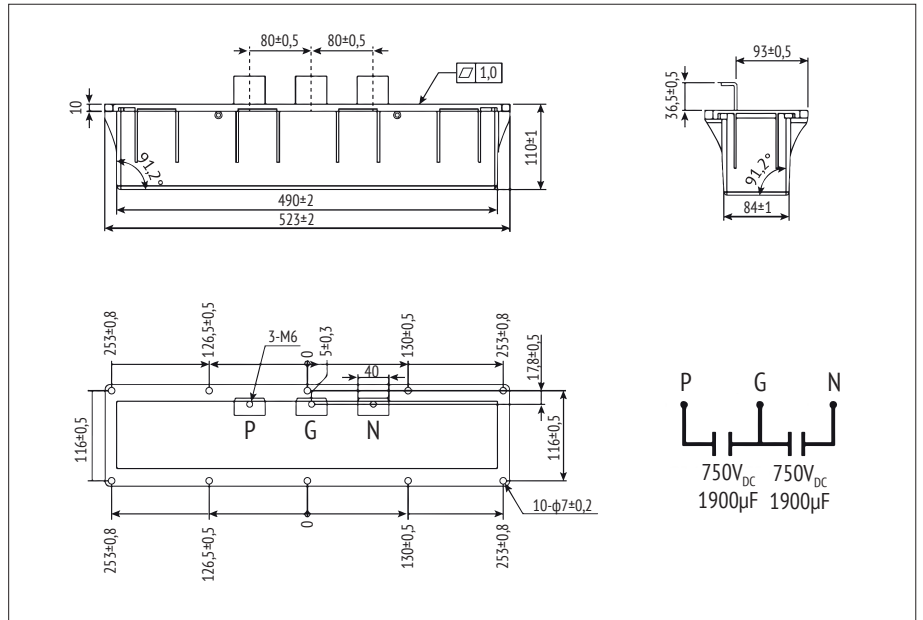


MODULES

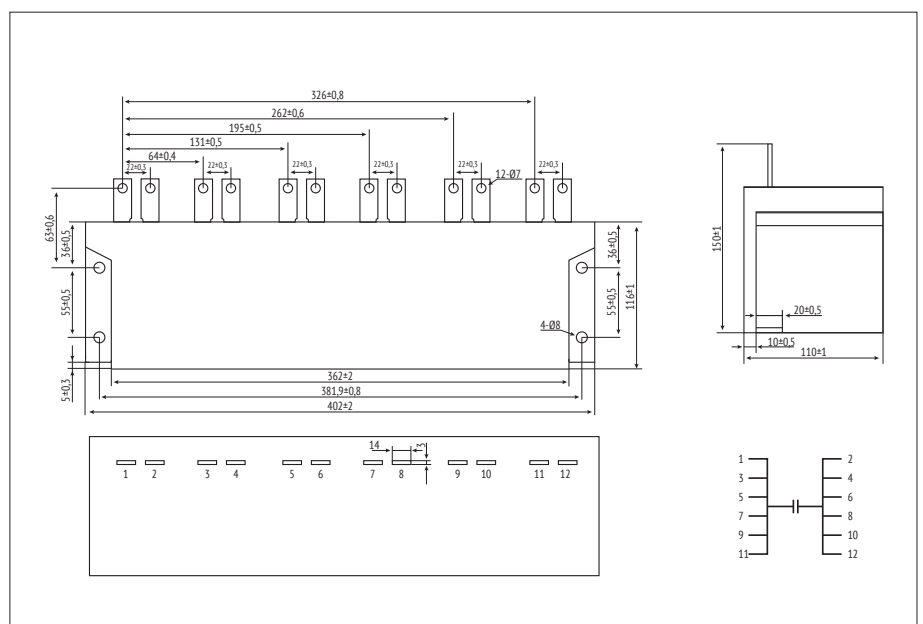
EXAMPLE DRAWING #1 ▶



EXAMPLE DRAWING #2 ▶



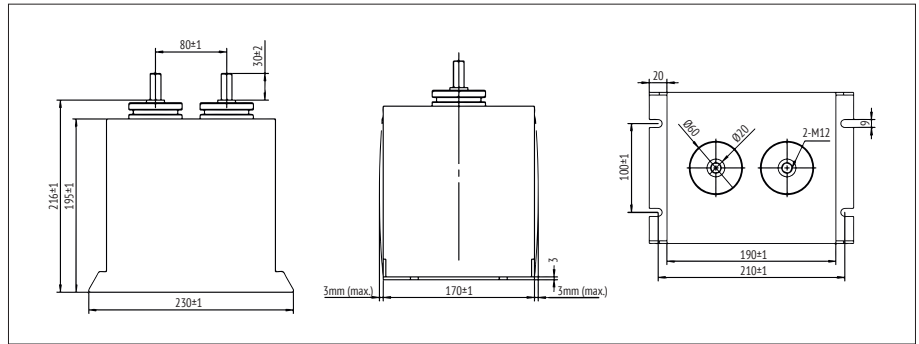
EXAMPLE DRAWING #3 ▶



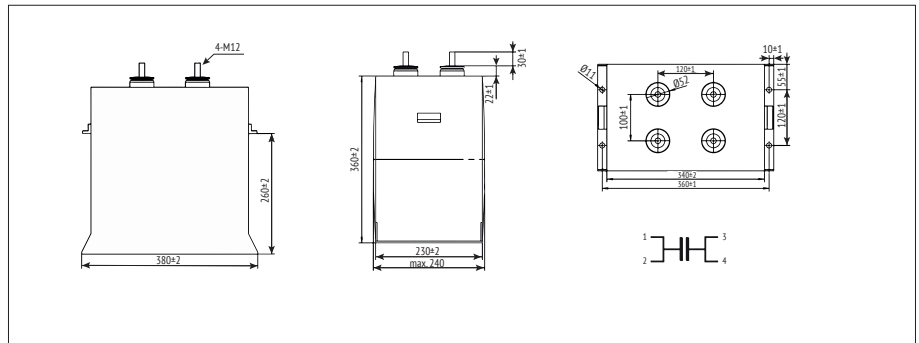
MODULES

in mm

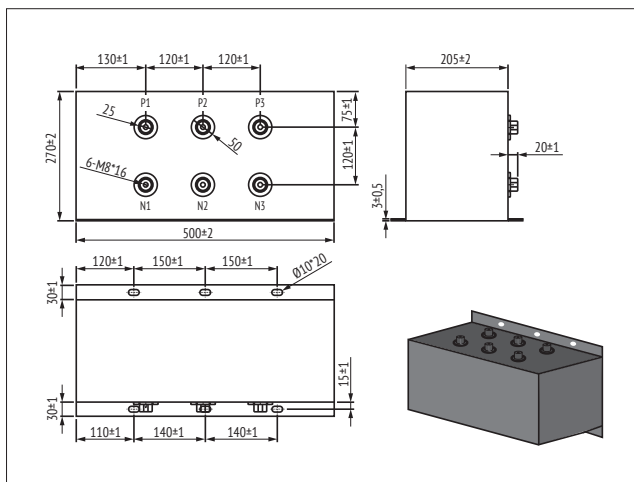
EXAMPLE DRAWING #4



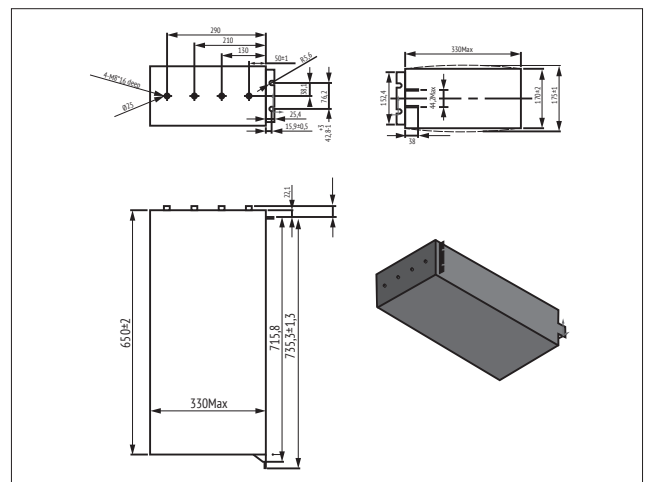
EXAMPLE DRAWING #5



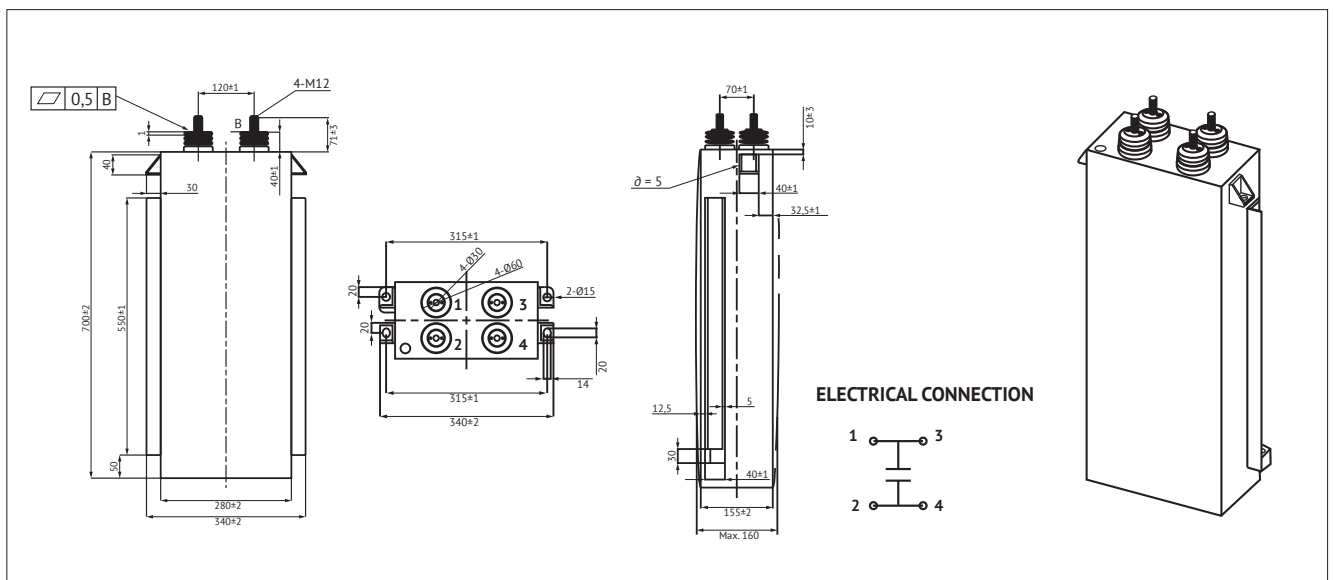
EXAMPLE DRAWING #6



EXAMPLE DRAWING #7



EXAMPLE DRAWING #8



in mm

MODULES

MARKING

	BRAND
CBB 133	SERIES DESIGNATION
2500 μ F \pm 10%	CAPACITANCE AND TOLERANCE
$U_R = 800V_{DC}$ SH	U_R RATED VOLTAGE
$U_{TC} = 3000V$ 50/60 HZ	U_{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
-40~+85°C IEC61071	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
J35F23104	DATE CODE

ORDER CODE

FC	S	2K	DM	158	K	024010013	E3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code Examples (μ F)	Capacitance tolerance	Dimension Code	For internal use
Film Cap. = FC	Square box = S	750 Q3 800 2K 900 R2 950 K3 1020 3A 1100 A3 1200 3B 2250 3T 2500 3E 3000 3F	CBB 133 = DM	1500 158 2800 288 13500 139	\pm 5% J \pm 10% K	0 2 4 0 1 0 0 1 3	

RATINGS

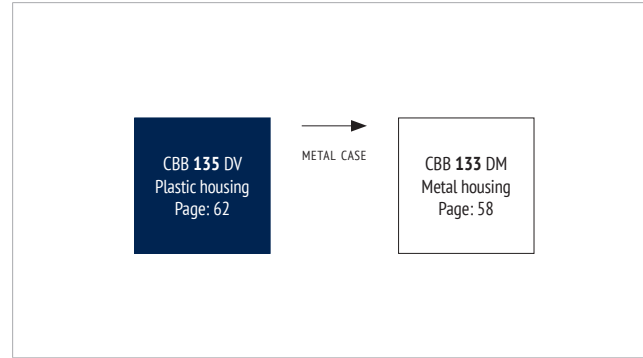
U_R (V_{DC})	C_R (μ F)	I_{MAX} 60°C 10kHz (A)	$\bar{I}^{(1)}$ (A)	R_S 20°C 10kHz (m Ω)	L_S 20°C (nH)	W (mm)	H (mm)	T (mm)	ORDER CODE
750 Q3	2800	80	2200	0,8	80	240	103	125	FCSQ3DM288K024010013E3
	3800	80	3800	0,6	80	490	110	84	FCSQ3DM388K049011009E3
800 2K	2500	250	3500	0,6	50	190	195	170	FCS2KDM258K019020017E3
	2500	300	3500	0,4	50	402	116	110	FCS2KDM258K040012011E3
900 R2	18000	400	3600	0,7	50	500	460	120	FCSR2DM189K050046012E3
950 K3	3 x 2500	3 x 135	3 x 8400	3 x 1,5	50	500	205	270	FCSK3DM258J050021027E3
	2 x 3750	2 x 140	2 x 6200	2 x 1,2	50	500	205	270	FCSK3DM758J050021027E3
1020 3A	13500	300	5050	0,5	60	330	650	170	FCS3ADM139K033065017E3
1100 A3	900	100	9000	1	80	163	152	162	FCSA3DM907K016015016E3
1200 3B	8000	260	6000	0,5	80	620	200	140	FCS3BDM808K062020014E3
	9000	500	18.000	1,2	50	680	210	230	FCS3BDM908J068021023E3
	20.000	250	100.000	1	50	280	700	155	FCS3BDM209S028070016E3
	65.000	400	100.000	1	50	460	880	185	FCS3BDM659S046088019E3
2250 3T	4000	400	19.000	0,5	60	340	175	670	FCS3TDM408J034018067E3
2500 3E	30.000	100	90.000	0,8	100	395	1170	220	FCS3EDT309K040117022E3
3000 3F	1500	150	4000	1	100	340	360	230	FCS3FDM158J034036023E3

(1) Maximum permissible peak current

FEATURES

- Customer Specific Designs
- High ripple current capability
- Self-healing
- Long lifetime

OVERVIEW



PRODUCT



APPLICATIONS

- High power frequency converters
- Electric and hybrid electric vehicles

CHARACTERISTICS

ITEM	CHARACTERISTICS
Climatic Category	40/105/56 (IEC 61071)
Operating Temperature	-40 ~ +105 °C ($\Theta_{\text{hotspot}} \leq 105$ °C) $\Theta_{\text{hotspot}} = 85\text{--}105$ °C; See Voltage Derating Diagram
Storage Temperature	-40 ~ +105 °C
Rated Voltage U_{RDC}	450 ~ 800 V _{DC}
Capacitance Range	300 ~ 1.000 μF
Capacitance Tolerance	± 10 % (K), ± 5 % (I)
Voltage between Terminals U_{TT}	1,5 * U_{RDC} (20°C, 10s)
Voltage between Terminals and Case U_{TC}	$\geq 3.000 V_{\text{AC}}$ (20°C, 50 Hz, 10s)
Max. Overvoltage	1,1 * U_{RDC} (30 % of time under load) 1,15 * U_{RDC} (30 min. per day) 1,2 * U_{RDC} (5 min. per day) 1,3 * U_{RDC} (1 min. per day) 1,5 * U_{RDC} (max. 30 ms, 100ms per day)
Insulation Resistance R_i °C	$\geq 10.000 \text{ M}\Omega \cdot \mu\text{F}$ (20 °C, 100 V _{DC} , 1 min)
Dielectric Dissipation Factor $\tan \delta_o$	$\leq 2 \cdot 10^{-4}$ (20 °C, 1 kHz)
Life Time Expectancy	100.000h, failure rate 100 FIT ($\Theta_{\text{hotspot}} 70$ °C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

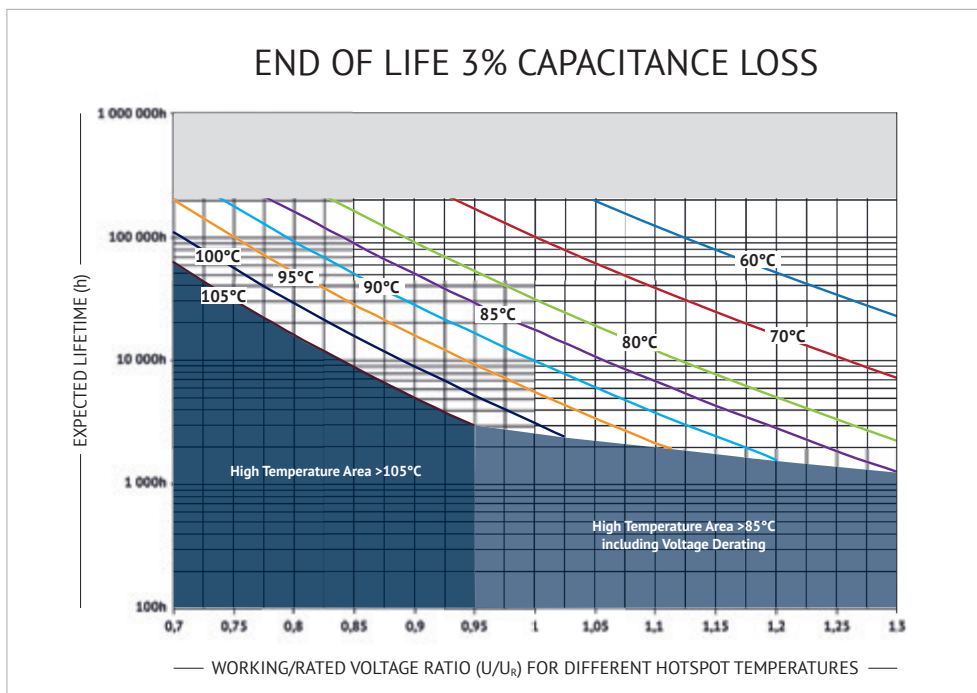
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

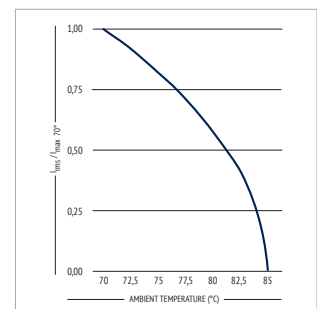
APPROVALS

- UL94-V0:**
Plastic & Compound Mass
- UL810:**
CZDS2.E227010 (Construction)
(except customized)

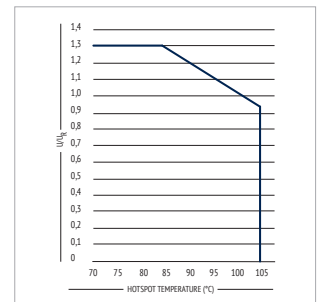
LIFETIME



CURRENT DERATING



VOLTAGE DERATING

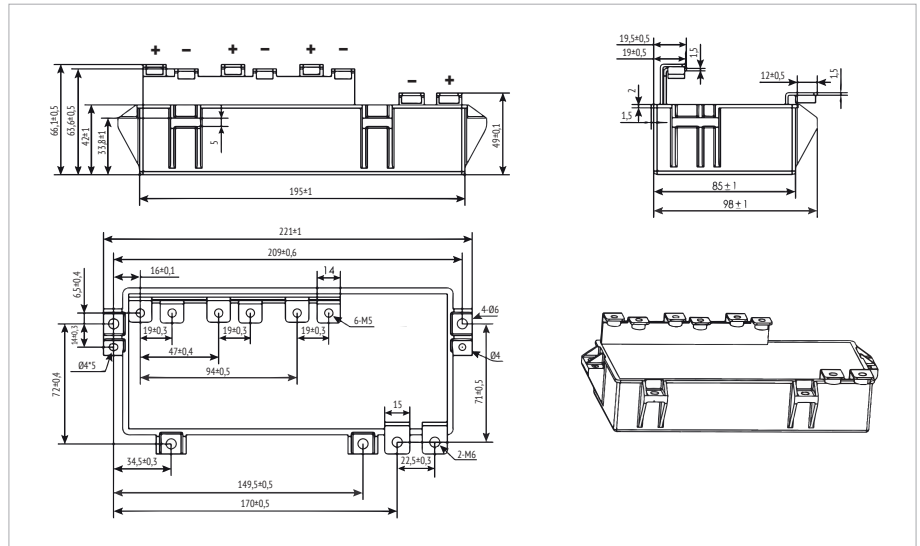


MODULES

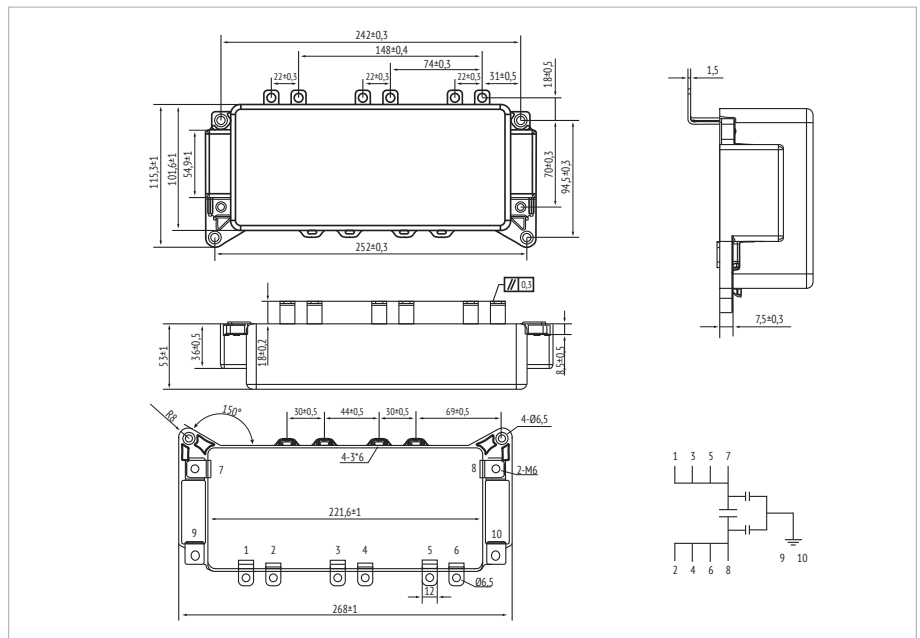
MARKING

	BRAND
CBB 135	SERIES DESIGNATION
500 μ F \pm 10%	CAPACITANCE AND TOLERANCE
$U_R = 800V_{dc}SH$	U_R RATED VOLTAGE
$U_{TC} = 3000V 50/60 HZ$	U_{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
-40~+105°C IEC61071	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
E03F0310	DATE CODE

EXAMPLE DRAWING #1

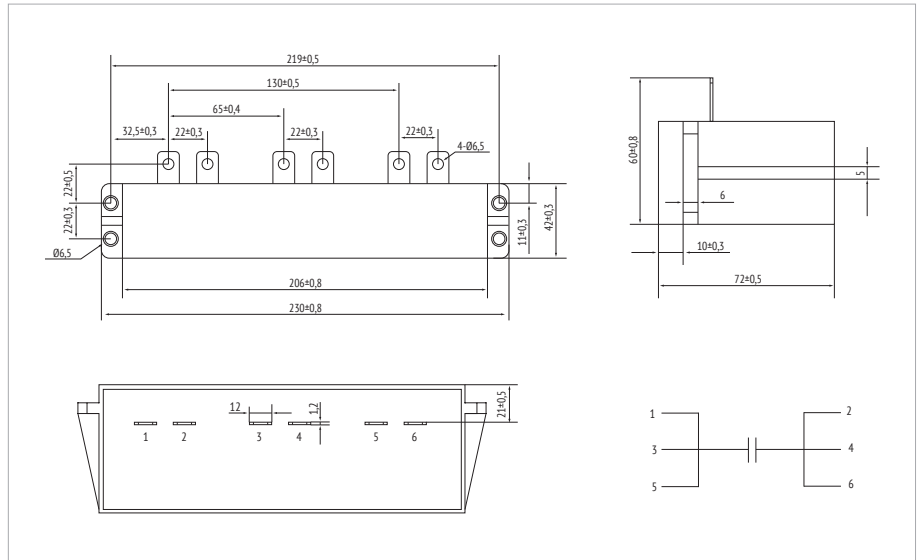


EXAMPLE DRAWING #2

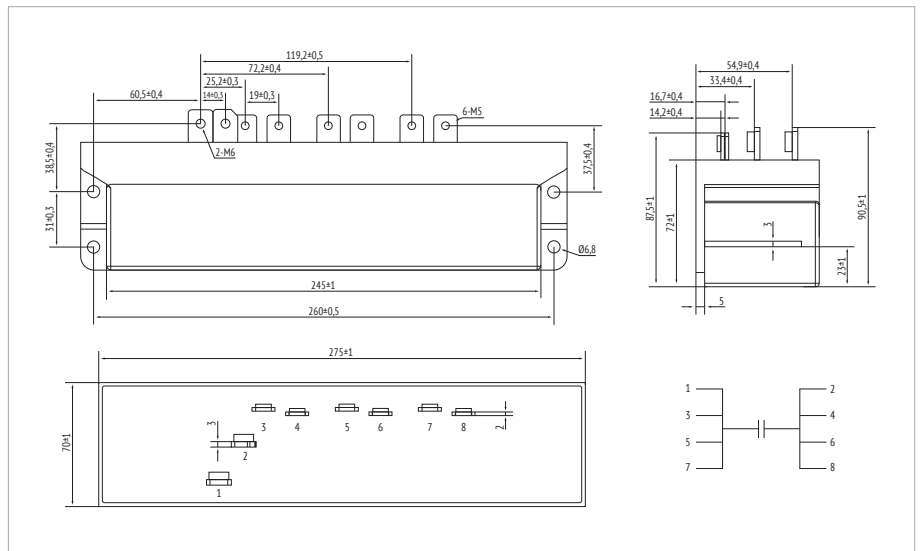


in mm

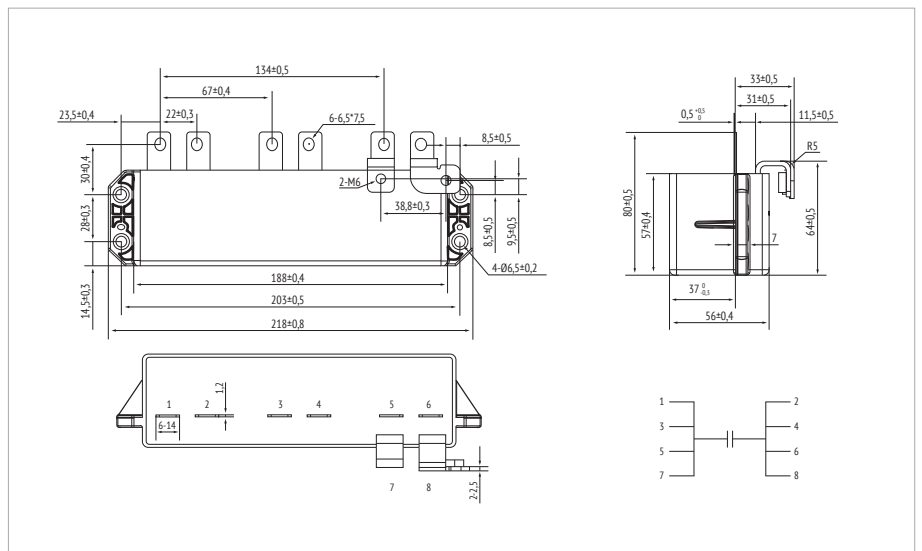
EXAMPLE DRAWING #3 ▶



EXAMPLE DRAWING #4 ▶



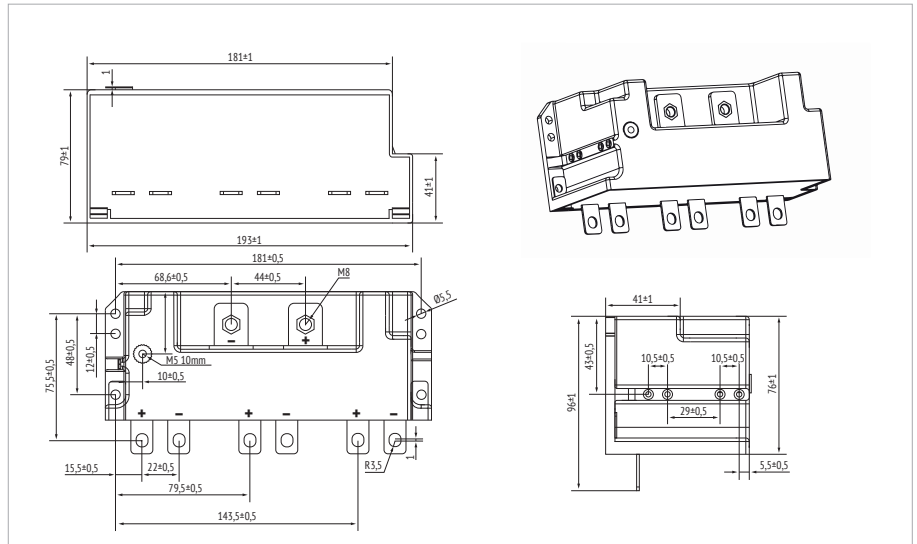
EXAMPLE DRAWING #5 ▶



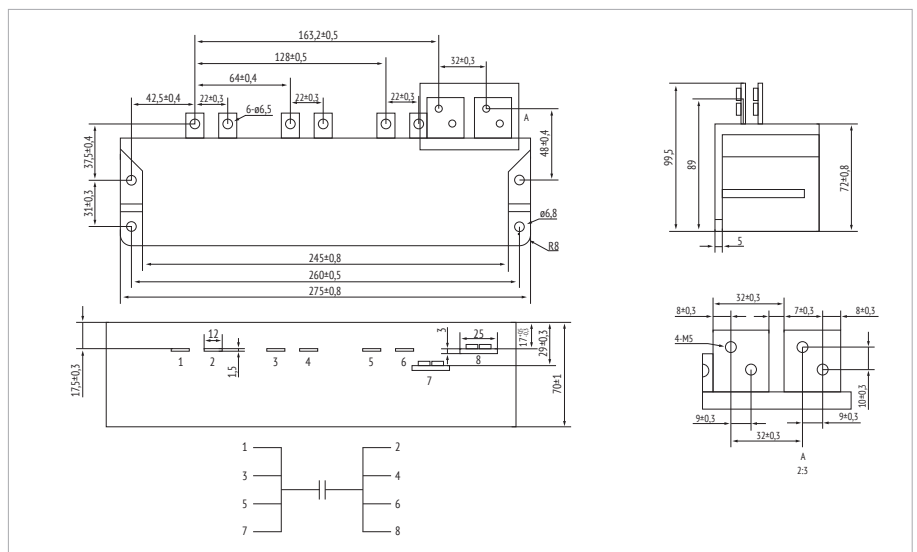
in mm

MODULES

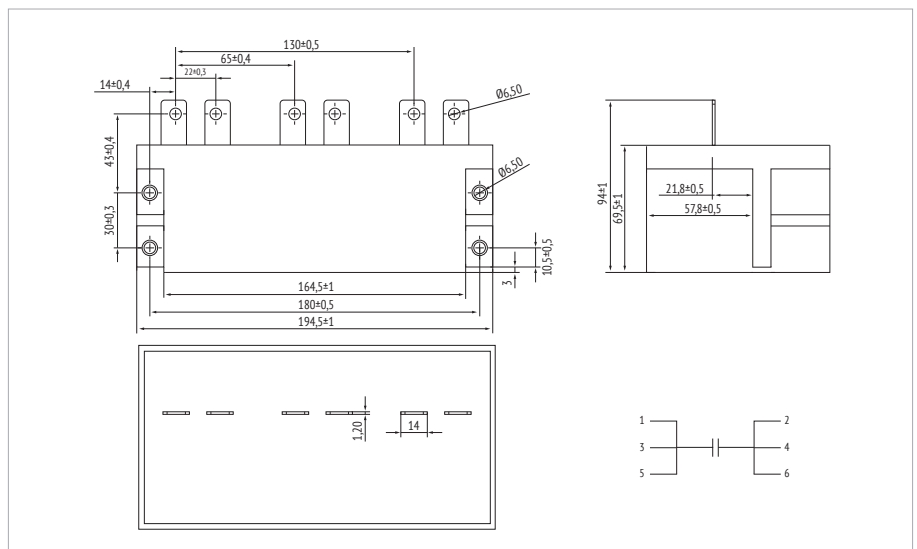
EXAMPLE DRAWING #6 ▶



EXAMPLE DRAWING #7 ▶



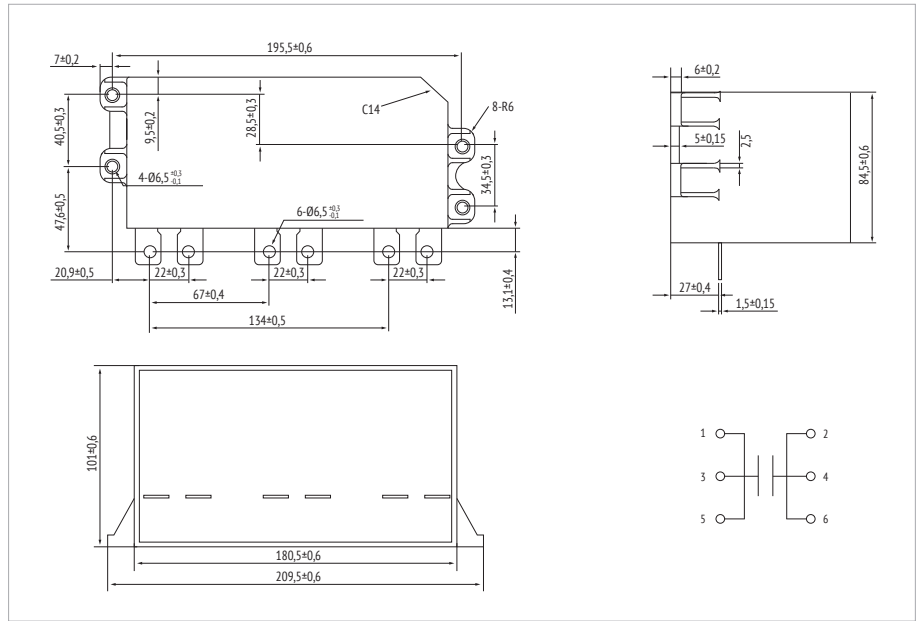
EXAMPLE DRAWING #8 ▶



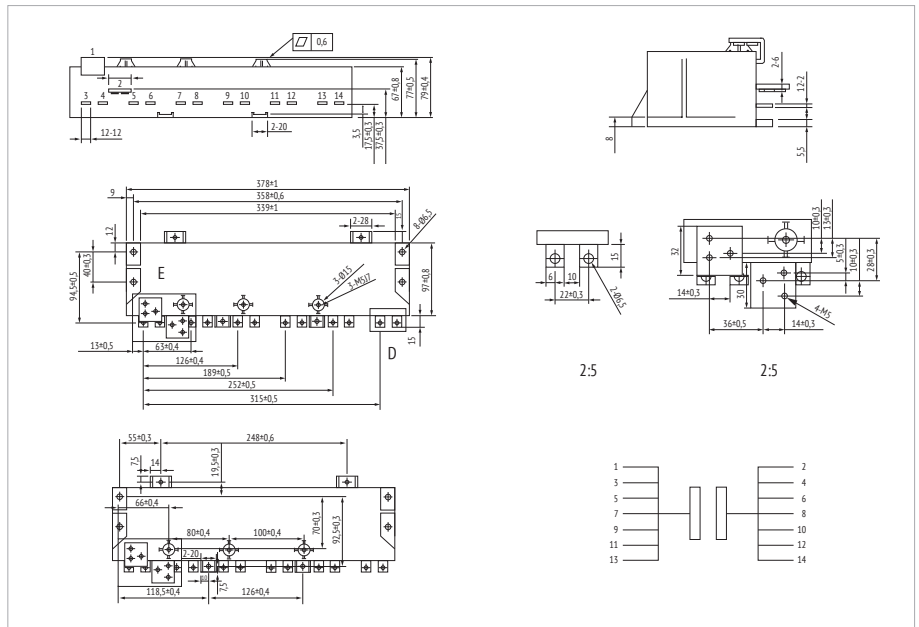
in mm

MODULES

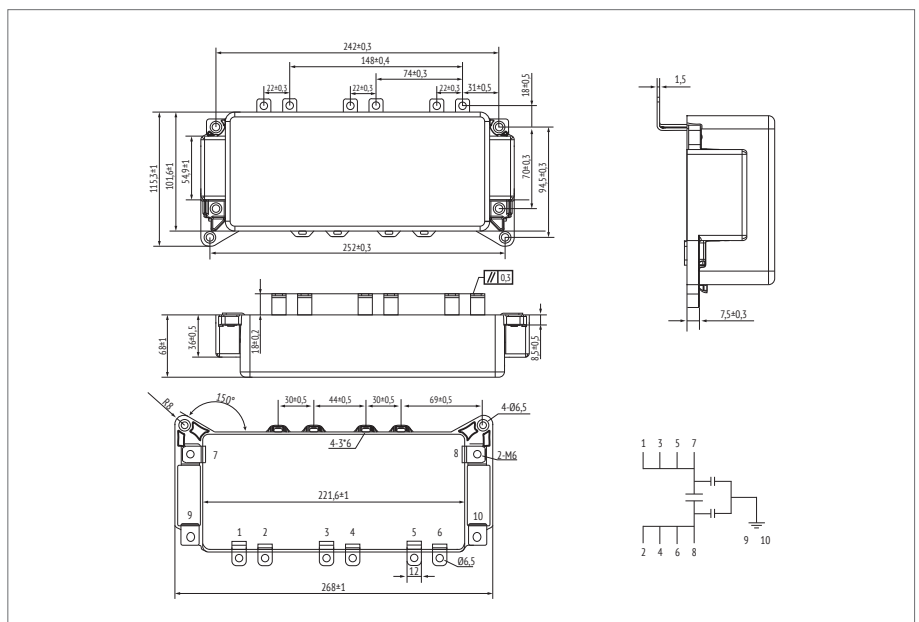
■ **EXAMPLE DRAWING #9** ▶



■ **EXAMPLE DRAWING #10** ▶



■ **EXAMPLE DRAWING #11** ▶



in mm

MODULES

ORDER CODE

FC	S	2W	DV	507	K	B010	0	2	1	E 3
Capacitor type	Product shape	DC rated voltage code (V)	Series code	Capacitance Code (μF)	Capacitance tolerance	Dimension Code W x H x T (mm)	Hole Shape (mm)	Terminal Pitch (mm)	Mounting Hole	For internal use
Film Cap. = FC	Square box = S	450 2W 500 2H 600 2S 800 2K	CBB 135 = DV	500 507 1000 108	±5% J ±10% K	275 x 72 x 70 B010 376 x 97 x 67 B018 other on request	6,5 0 5,5 3 M6 1 M5 2	19 1 22 2	Without 0 With 1 Other Y	

RATINGS

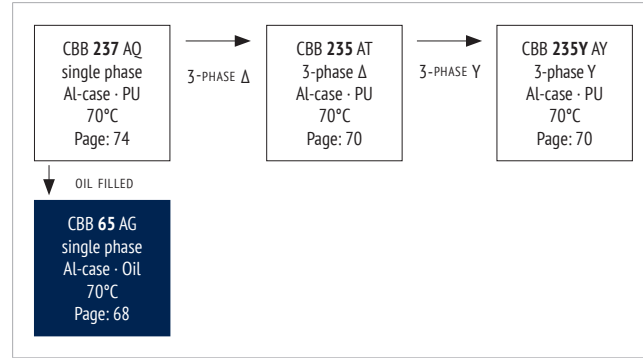
U _R ≤85°C (V _{DC})	C _R (μF)	I _{max} 85°C, 10kHz (A)	Ī ⁽¹⁾ (A)	R _S 20°C, 10kHz (mΩ)	L _S 20°C (nH)	W (mm)	H (mm)	T (mm)	ORDER CODE
450 2W	400	100	2000	0,5	15	249	47	50	FCS2WDV407KB156021YE3
	1000	150	4000	0,6	30	268	53	101,6	FCS2WDV108KB025011E3
500 2H	500	90	2500	0,8	15	206	42	72	FCS2HDV507KB101021E3
	500	130	2500	0,45	18	197	78,5	40	FCS2HDV507KB191021YE3
	700	130	7000	0,5	15	214	42	82	FCS2HDV707KB194811E3
	850	180	5500	0,5	15	275	72	70	FCS2HDV857KB010811E3
600 2S	450	125	3300	0,42	18	188	57	56	FCS2SDV457KB109021E3
800 2K	300	125	3000	0,5	18	188	57	56	FCS2KDV307KB109021E3
	400	110	2000	0,6	20	193	76	79	FCS2KDV407KB059121E3
	420	100	4000	0,65	15	210	81	72	FCS2KDV427KB009021E3
	500	150	4000	0,6	15	275	72	70	FCS2KDV507KB010021E3
	500	160	6000	0,6	30	194,5	69,5	100	FCS2KDV507KB051021E3
	560	200	8000	0,4	24	209,5	84,5	101	FCS2KDV567KB037021E3
	850	200	8000	0,4	20	376	97	67	FCS2KDV857KB018021E3
	850	200	8000	0,4	15	361	70	65	FCS2KDV857KB166021E3
	900	180	4500	0,5	20	291	219	40	FCS2KDV907KB114231E3
	1000	160	4000	0,8	30	268	68	101,6	FCS2KDV108KB015021E3

(1) Maximum permissible peak current

FEATURES

- Used in AC circuits as motor start capacitor
- Excellent Temperature behavior
- Self-healing
- Overpressure disconnecter design 10k AFC
- Aluminum case, filled with castor oil

OVERVIEW



PRODUCT



APPLICATIONS

- General AC application
- Air-conditioner
- Motor start

CHARACTERISTICS

ITEM	CHARACTERISTICS
Reference Standard	GB/T 3667(IEC 60252-1)
Climatic Category	40/70/21
Operating Temperature Range	-40 ~ +70 °C ($\theta_{hotspot} \leq 85^{\circ}C$)
Storage Temperature Range	-40 ~ +85 °C
Rated Voltage	450 V _{AC}
Capacitance Range	2 ~ 100μF
Capacitance Tolerance	±5% (J), ±10% (K)
U _{TT} Voltage between Terminals	2,15xU _{RAC} , 10s (20°C)
U _{TC} Voltage between Terminals & Case	≥2.000V _{AC} , 10s (20°C, 50 Hz)
Dielectric Dissipation Factor	≤ 2x10 ⁻⁴
Insulation Resistance R ^o C	≥30.000MΩ·μF (20°C, 100V _{DC} , 1min)
Life Time Expectancy	Class A: 30.000 hours Class B: 10.000 hours Class C: 3.000 hours
Failure Rate	100 FIT

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

UL94-V0:
Plastic

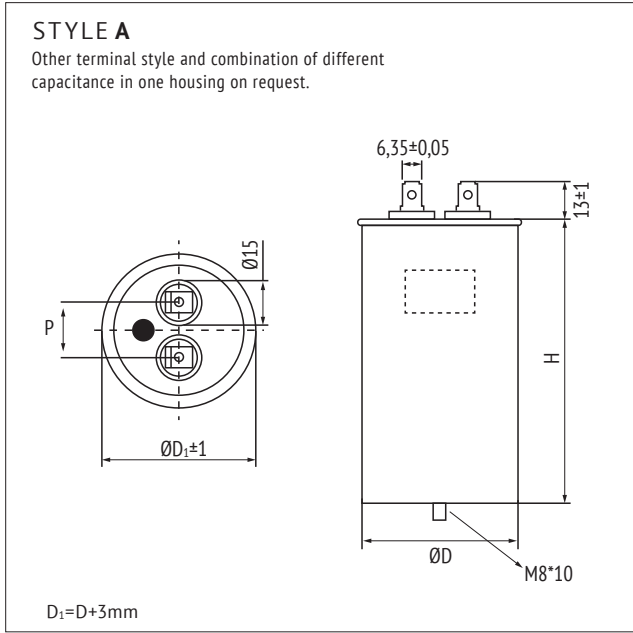
UL810:
CYWT2.E483921

MARKING

	BRAND
CBB 65	SERIES DESIGNATION
60μF ±10%	CAPACITANCE AND TOLERANCE
U _R = 450V _{AC} SH	U _R RATED VOLTAGE
U _{TC} = 2000V 50/60 HZ	U _{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
-40~+70°C IEC60252-1	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
J67F26	DATE CODE

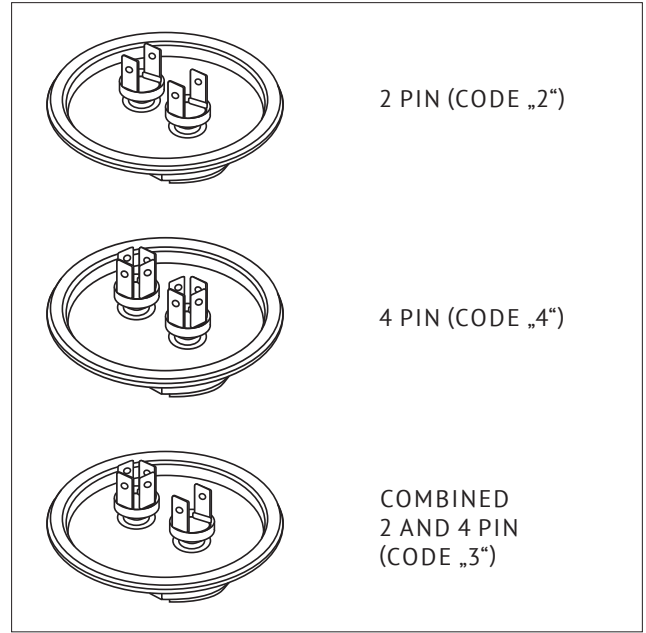
AC

DIMENSIONS AND CAN STYLE



in mm

TERMINALS



ORDER CODE

FC	S	4F	AG	706	K	D	125			E 3		
Capacitor type	Product shape	AC rated voltage code (V)	Series code	Capacitance Code Examples (µF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminals	Terminal Pitch (mm)	Bottom Bolt	Can Style	For internal use
Film Cap. = FC	cylindrical = C	450 4F	CBB 65 = AG	2 205 3,2 325 4,5 455 10 106 40 406 55 556 70 706 100 107	±5% J ±10% K -15-0% P Special S	40 A 45 B 50 D 55 C 60 F 63,5 E	55 055 60 060 65 065 75 075 85 085 100 100 110 110 125 125	4pin 4 2pin 2 2+4pin 3	16 B 18 1 20 2	Without 0 With 1	Style A A	

RATINGS

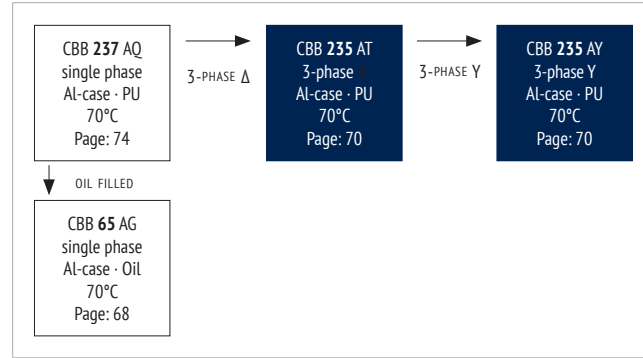
U _r ≤70°C (V _{ac})	C _r (µF)	D ±1,0 (mm)	D ₁ ±1,0 (mm)	H ±2,0 (mm)	P ±0,5 (mm)	ORDER CODE *#* to be defined, see ordering code table
450 4F	2	40	43	55	16	FCC4FAG205#A055#B#AE3
	2,2	40	43	55	16	FCC4FAG225#A055#B#AE3
	3	40	43	55	16	FCC4FAG305#A055#B#AE3
	3,2	40	43	55	16	FCC4FAG325#A055#B#AE3
	3,5	40	43	55	16	FCC4FAG355#A055#B#AE3
	4	40	43	55	16	FCC4FAG405#A055#B#AE3
	4,5	40	43	55	16	FCC4FAG455#A055#B#AE3
	5	40	43	55	16	FCC4FAG505#A055#B#AE3
	6	40	43	55	16	FCC4FAG605#A055#B#AE3
	7	40	43	55	16	FCC4FAG705#A055#B#AE3
	7	40	43	65	16	FCC4FAG705#A065#B#AE3
	7,5	40	43	65	16	FCC4FAG755#A065#B#AE3
	8	40	43	55	16	FCC4FAG805#A055#B#AE3
	8	40	43	65	16	FCC4FAG805#A065#B#AE3
	8	40	43	60	16	FCC4FAG805#A060#B#AE3
	9	40	43	75	16	FCC4FAG905#A075#B#AE3
	10	40	43	75	16	FCC4FAG106#A075#B#AE3
	10	40	43	60	16	FCC4FAG106#A060#B#AE3
10	55	58	65	20	FCC4FAG106#C065#2#AE3	
12	40	43	100	16	FCC4FAG126#A100#B#AE3	
12	40	43	65	16	FCC4FAG126#A065#B#AE3	
13	40	43	100	16	FCC4FAG136#A100#B#AE3	

U _r ≤70°C (V _{ac})	C _r (µF)	D ±1,0 (mm)	D ₁ ±1,0 (mm)	H ±2,0 (mm)	P ±0,5 (mm)	ORDER CODE *#* to be defined, see ordering code table
450 4F	14	40	43	100	16	FCC4FAG146#A100#B#AE3
	15	40	43	85	16	FCC4FAG156#A085#B#AE3
	17	40	43	100	16	FCC4FAG176#A100#B#AE3
	25	50	53	75	20	FCC4FAG256#D075#2#AE3
	30	50	53	85	20	FCC4FAG306#D085#2#AE3
	40	50	53	100	20	FCC4FAG406#D100#2#AE3
	45	50	53	110	20	FCC4FAG456#D110#2#AE3
	45	50	53	100	20	FCC4FAG456#D100#2#AE3
	45	45	48	125	20	FCC4FAG456#B125#2#AE3
	45	60	63	85	20	FCC4FAG456#F085#2#AE3
	50	50	53	110	20	FCC4FAG506#D110#2#AE3
	50	45	48	125	20	FCC4FAG506#B125#2#AE3
	50	60	63	85	20	FCC4FAG506#F085#2#AE3
	55	55	58	110	20	FCC4FAG556#C110#2#AE3
	55	50	53	125	20	FCC4FAG556#D125#2#AE3
	60	50	53	125	20	FCC4FAG606#D125#2#AE3
	60	55	58	125	20	FCC4FAG606#C125#2#AE3
	70	55	58	125	20	FCC4FAG706#C125#2#AE3
80	60	63	125	20	FCC4FAG806#F125#2#AE3	
100	60	63	125	20	FCC4FAG107#F125#2#AE3	
100	63,5	66,5	125	20	FCC4FAG107#E125#2#AE3	

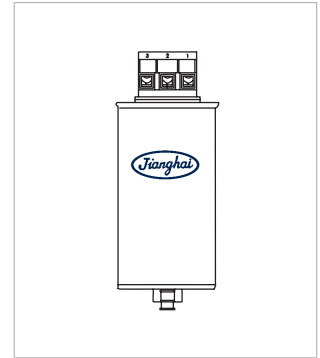
FEATURES

- Used in AC filtering and Power factor correction
- Excellent Temperature behavior
- Self-healing
- Overpressure disconnecter design
- Aluminum case, filled with soft PU resin
- Δ or Y connection

OVERVIEW



PRODUCT



APPLICATIONS

- Solar
- Wind energy
- Power factor correction

CHARACTERISTICS

ITEM	CHARACTERISTICS
Reference Standard	GB/T 17702 (IEC 61071) , IEC60831
Climatic Category	40/70/56
Operating Temperature Range	-40 ~ +70°C ($\theta_{hotspot} \leq 85^\circ\text{C}$)
Storage Temperature Range	-40 ~ +85°C
Rated Voltage U_{RMS}	230 ~ 690 V_{AC}
Capacitance Range	3*20,3 ~ 3*335 μF
Capacitance Tolerance	±5% (J), ±10% (K)
U_{TT} Voltage between Terminals	2,15 x U_N (V_{AC}), 10s (20°C)
U_{TC} Voltage between Terminals & Case	$\geq 4.000V_{AC}$, 10s (20°C, 50 Hz)
Dielectric Dissipation Factor δ_0	$\leq 0,0002$
Insulation Resistance R^*C	$\geq 5.000 \text{ M}\Omega \cdot \mu\text{F}$ (20°C, 100 V_{DC} , 1min)
Max. Overvoltage	1,1 * U_N (30% of on-load-duration) 1,15 * U_N (30 min/day) 1,2 * U_N (5 min/day) 1,3 * U_N (1 min/day) 1,5 * U_N (30ms every time, 100 ms/day)
Max. Torque of terminals	M5: 2Nm M6: 3Nm M8: 4Nm M10: 6Nm
Max. Torque Bolt	M12: 10Nm
Life Expectancy	100.000 hours ($U_R, \theta_{hotspot} = 70^\circ\text{C}$)
Failure Rate	100 FIT

ENVIRONMENTAL

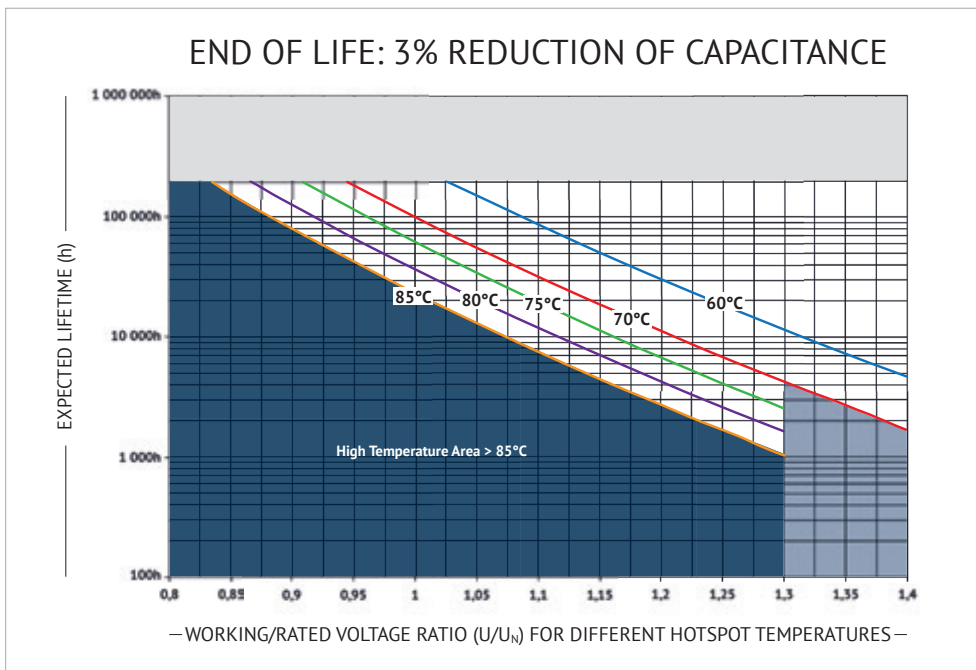
The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

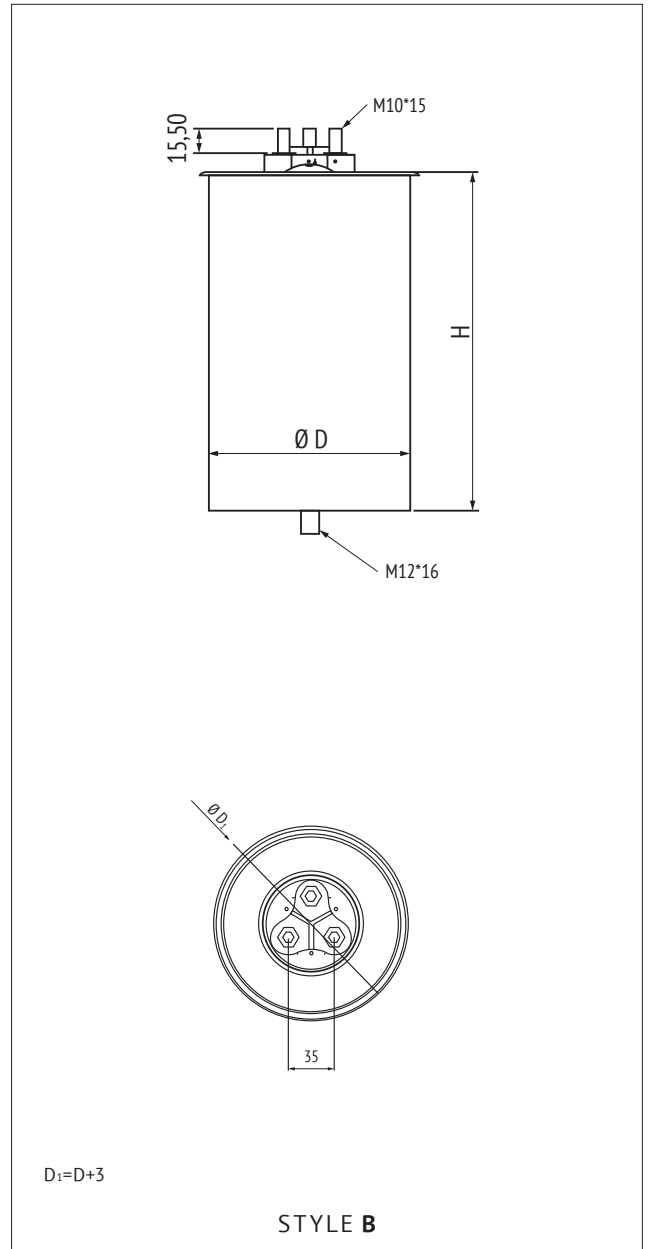
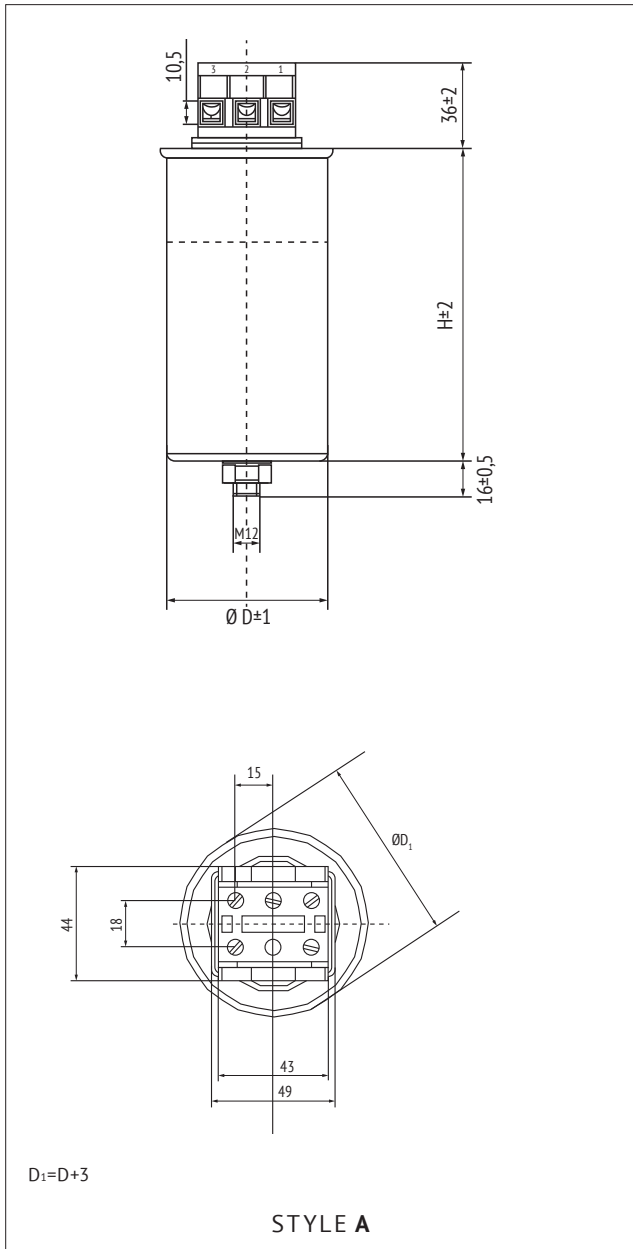
- UL94-V0:**
Plastic & Compound Mass
- UL810:**
CYWT2.E483921

LIFETIME



AC

■ DIMENSIONS AND CAN STYLE



in mm

■ MARKING

	BRAND
CBB 235	SERIES DESIGNATION
$3 \times 110.7 \mu\text{F} \pm 10\% \Delta$	CAPACITANCE AND TOLERANCE
$U_R = 400\text{V}_{AC} \text{ SH}$	U_R RATED VOLTAGE
$U_{TC} = 4000\text{V} \text{ 50/60 HZ}$	U_{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
$-40 \sim +70^\circ\text{C} \text{ IEC61071}$	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
J32F36	DATE CODE

AC

ORDER CODE

FC	C	4A	AT	757	K	L	265	5	A	1	A	E3
Capacitor type	Product shape	AC rated voltage code (V)	Series code	Capacitance Code Examples (µF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminal Style (mm)	Terminal Pitch (mm)	Stud Bolt Mounting	Can Style	For internal use
Film Cap. = FC	Cylindrical = C	230 2D 400 4A 440 4E 480 4J 530 5D 660 6G 690 6K	CBB 235 = AT CBB 235Y = AY	60 606 100 107 330 337 750 757 900 907 1000 108	±5% J ±10% K -15/+0% P	86 L 96 W 116 P 136 T	160 160 200 200 230 230 265 265 350 350	6 Pin: M5 6 6 Pin: M6 5 3 Pin: M6 1 3 Pin: M8 2 3 Pin: M10 4	15 A 35 B	bolt M12x16 1 flat, without bracket 0	Style A A Style B B	

RATINGS

U _{RMS} /U _N ≤70°C	C _R	dV/dt	P 50Hz	I _{max} 50°C / 1kHz	I ⁽¹⁾	D ±1,0	H ±2,0	ORDER CODE CBB 235 AT Δ Connected	ORDER CODE CBB 235Y AY Y Connected
(V _{Ac})	(µF)	(V/µs)	(kVar)	(A)	(A)	(mm)	(mm)	"#" to be defined, see ordering code table	"#" to be defined, see ordering code table
230/325 2D	3 x 200,6	25	10,0	25,1	5021	86	275	FCC2DAT207#L275###E3	FCC2DAY207#L275###E3
	3 x 200,6	25	10,0	25,1	5021	116	160	FCC2DAT207#P160###E3	FCC2DAY207#P160###E3
	3 x 250,7	25	12,5	31,4	6276	86	350	FCC2DAT257#L350###E3	FCC2DAY257#L350###E3
	3 x 250,7	25	12,5	31,4	6276	116	200	FCC2DAT257#P200###E3	FCC2DAY257#P200###E3
	3 x 300,9	25	15,0	37,7	7531	86	350	FCC2DAT307#L350###E3	FCC2DAY307#L350###E3
	3 x 300,9	25	15,0	37,7	7531	116	200	FCC2DAT307#P200###E3	FCC2DAY307#P200###E3
3 x 335,0	25	16,7	41,9	8384	116	230	FCC2DAT337#P230###E3	FCC2DAY337#P230###E3	
400/560 4A	3 x 66,3	44	10,0	14,4	2887	86	200	FCC4AAT666#L200###E3	FCC4AAY666#L200###E3
	3 x 82,9	44	12,5	18,0	3609	86	200	FCC4AAT836#L200###E3	FCC4AAY836#L200###E3
	3 x 99,5	44	15,0	21,7	4330	86	275	FCC4AAT996#L275###E3	FCC4AAY996#L275###E3
	3 x 110,7	44	16,7	24,1	4821	86	275	FCC4AAT117#L275###E3	FCC4AAY117#L275###E3
	3 x 110,7	44	16,7	24,1	4821	116	160	FCC4AAT117#P160###E3	FCC4AAY117#P160###E3
	3 x 132,6	44	20,0	28,9	5774	86	275	FCC4AAT137#L275###E3	FCC4AAY137#L275###E3
	3 x 132,6	44	20,0	28,9	5774	116	200	FCC4AAT137#P200###E3	FCC4AAY137#P200###E3
	3 x 165,8	44	25,0	36,1	7217	86	275	FCC4AAT167#L275###E3	FCC4AAY167#L275###E3
	3 x 165,8	44	25,0	36,1	7217	116	200	FCC4AAT167#P200###E3	FCC4AAY167#P200###E3
	3 x 198,9	44	30,0	43,3	8661	136	200	FCC4AAT197#T200###E3	FCC4AAY197#T200###E3
440/625 4E	3 x 46	48	8,3	10,9	2178	86	160	FCC4EAT466#L160###E3	FCC4EAY466#L160###E3
	3 x 68,5	48	12,5	16,4	3280	86	200	FCC4EAT686#L200###E3	FCC4EAY686#L200###E3
	3 x 77,0	48	14,1	18,5	3700	86	200	FCC4EAT776#L200###E3	FCC4EAY776#L200###E3
	3 x 77,0	48	14,1	18,5	3700	116	160	FCC4EAT776#P160###E3	FCC4EAY776#P160###E3
	3 x 82,2	48	15,0	19,7	3937	86	200	FCC4EAT826#L200###E3	FCC4EAY826#L200###E3
	3 x 92,6	48	16,9	22,2	4435	116	200	FCC4EAT926#P200###E3	FCC4EAY926#P200###E3
	3 x 103,0	48	18,8	24,7	4934	86	275	FCC4EAT107#L275###E3	FCC4EAY107#L275###E3
	3 x 103,0	48	18,8	24,7	4934	116	160	FCC4EAT107#P160###E3	FCC4EAY107#P160###E3
	3 x 109,0	48	20,0	26,2	5249	86	275	FCC4EAT117#L275###E3	FCC4EAY117#L275###E3
	3 x 109,0	48	20,0	26,2	5249	116	160	FCC4EAT117#P160###E3	FCC4EAY117#P160###E3
	3 x 123,3	48	22,5	29,5	5905	86	275	FCC4EAT127#L275###E3	FCC4EAY127#L275###E3
	3 x 123,3	48	22,5	29,5	5905	116	200	FCC4EAT127#P200###E3	FCC4EAY127#P200###E3
	3 x 137,0	48	25,0	32,8	6561	86	275	FCC4EAT137#L275###E3	FCC4EAY137#L275###E3
	3 x 137,0	48	25,0	32,8	6561	116	200	FCC4EAT137#P200###E3	FCC4EAY137#P200###E3
	3 x 154,0	48	28,1	36,9	7375	86	275	FCC4EAT157#L275###E3	FCC4EAY157#L275###E3
	3 x 154,0	48	28,1	36,9	7375	116	200	FCC4EAT157#P200###E3	FCC4EAY157#P200###E3
	3 x 164,4	48	30,0	39,4	7873	86	350	FCC4EAT167#L350###E3	FCC4EAY167#L350###E3
3 x 164,4	48	30,0	39,4	7873	116	200	FCC4EAT167#P200###E3	FCC4EAY167#P200###E3	
3 x 180,9	48	33,0	43,3	8661	136	200	FCC4EAT187#T200###E3	FCC4EAY187#T200###E3	
480/680 4J	3 x 40	52	8,7	10,5	2093	86	200	FCC4JAT406#L200###E3	FCC4JAY406#L200###E3
	3 x 60	52	13,0	15,6	3127	86	275	FCC4JAT606#L275###E3	FCC4JAY606#L275###E3
	3 x 80	52	17,4	20,9	4186	116	200	FCC4JAT806#P200###E3	FCC4JAY806#P200###E3
	3 x 120	52	26,0	31,3	6255	116	275	FCC4JAT127#P275###E3	FCC4JAY127#P275###E3
530/750 5D	3 x 38,5	57	10,0	11,0	2199	86	200	FCC5DAT386#L200###E3	FCC5DAY386#L200###E3
	3 x 48,1	57	12,5	13,7	2749	86	200	FCC5DAT486#L200###E3	FCC5DAY486#L200###E3
	3 x 53,1	57	13,8	15,2	3035	86	200	FCC5DAT536#L200###E3	FCC5DAY536#L200###E3
	3 x 57,7	57	15,0	16,5	3299	86	230	FCC5DAT576#L230###E3	FCC5DAY576#L230###E3
	3 x 77,0	57	20,0	22,0	4399	86	275	FCC5DAT776#L275###E3	FCC5DAY776#L275###E3

(1) Maximum permissible peak current



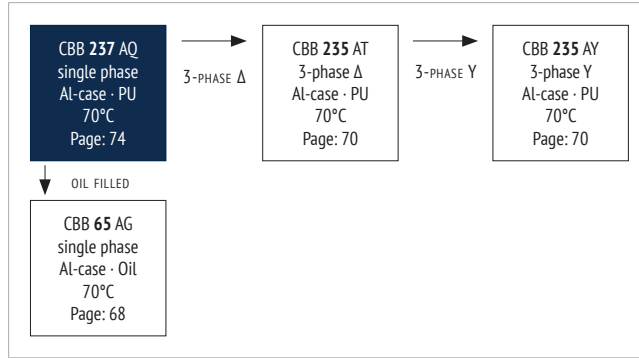
U_{RMS}/U_N $\leq 70^\circ\text{C}$ (V _{AC})	C_R (μF)	dV/dt (V/ μs)	P 50Hz (kVar)	I_{max} 50°C / 1kHz (A)	$\hat{I}^{(1)}$ (A)	D $\pm 1,0$ (mm)	H $\pm 2,0$ (mm)	ORDER CODE CBB 235 AT Δ Connected *#* to be defined, see ordering code table	ORDER CODE CBB 235Y AY Y Connected *#* to be defined, see ordering code table
530/750 5D	3 x 77,0	57	20,0	22,0	4399	116	200	FCC5DAT776#P200###E3	FCC5DAY776#P200###E3
	3 x 96,2	57	25,0	27,5	5499	86	350	FCC5DAT966#L350###E3	FCC5DAY966#L350###E3
	3 x 96,2	57	25,0	27,5	5499	116	200	FCC5DAT966#P200###E3	FCC5DAY966#P200###E3
	3 x 115,4	57	30,0	33,0	6598	116	230	FCC5DAT117#P230###E3	FCC5DAY117#P230###E3
	3 x 115,4	57	30,0	33,0	6598	136	200	FCC5DAT117#T200###E3	FCC5DAY117#T200###E3
	3 x 138,2	57	35,9	39,5	7896	116	275	FCC5DAT137#P275###E3	FCC5DAY137#P275###E3
	3 x 138,2	57	35,9	39,5	7896	136	230	FCC5DAT137#T230###E3	FCC5DAY137#T230###E3
	3 x 142,8	57	37,1	40,8	8160	116	275	FCC5DAT147#P275###E3	FCC5DAY147#P275###E3
3 x 142,8	57	37,1	40,8	8160	136	230	FCC5DAT147#T230###E3	FCC5DAY147#T230###E3	
660/930 6G	3 x 20,3	72	8,3	7,3	1457	86	200	FCC6GAT206#L200###E3	FCC6GAY206#L200###E3
	3 x 24,4	72	10,0	8,7	1750	86	200	FCC6GAT246#L200###E3	FCC6GAY246#L200###E3
	3 x 30,4	72	12,5	10,9	2187	86	230	FCC6GAT306#L230###E3	FCC6GAY306#L230###E3
	3 x 36,5	72	15,0	13,1	2624	96	230	FCC6GAT366#W230###E3	FCC6GAY366#W230###E3
	3 x 40,7	72	16,7	14,6	2922	96	230	FCC6GAT406#W230###E3	FCC6GAY406#W230###E3
	3 x 48,7	72	20,0	17,5	3499	86	350	FCC6GAT486#L350###E3	FCC6GAY486#L350###E3
	3 x 55,8	72	22,9	20,0	4007	86	350	FCC6GAT556#L350###E3	FCC6GAY556#L350###E3
690/980 6K	3 x 27,9	75	12,5	10,5	2092	86	230	FCC6KAT276#L230###E3	FCC6KAY276#L230###E3
	3 x 33,4	75	15,0	12,6	2510	96	230	FCC6KAT336#W230###E3	FCC6KAY336#W230###E3
	3 x 44,6	75	20,0	16,7	3347	86	350	FCC6KAT446#L350###E3	FCC6KAY446#L350###E3
	3 x 55,7	75	25,0	20,9	4184	86	350	FCC6KAT556#L350###E3	FCC6KAY556#L350###E3

(1) Maximum permissible peak current

FEATURES

- Used in AC filtering
- Excellent Temperature behavior
- Self-healing
- Overpressure disconnecter design
- Aluminum case, filled with soft PU resin

OVERVIEW



PRODUCT



APPLICATIONS

- Solar
- Wind energy
- UPS

CHARACTERISTICS

ITEM	CHARACTERISTICS
Reference Standard	GB/T 17702 (IEC 61071) , IEC60831
Climatic Category	40/70/56
Operating Temperature Range	-40 ~ +70°C ($\theta_{\text{hotspot}} \leq 85^\circ\text{C}$)
Storage Temperature Range	-40 ~ +85°C
Rated Voltage U_{RMS}	250 ~ 690 V _{AC}
Capacitance Range	10 ~ 600μF
Capacitance Tolerance	±5% (J), ±10% (K)
U_{TT} Voltage between Terminals	2,15 x U_{N} , 10s (20°C)
U_{TC} Voltage between Terminals & Case	≥4.000V _{AC} , 10s (20°C, 50 Hz)
Dielectric Dissipation Factor $\tan \delta_0$	≤2 x 10 ⁻⁴
Insulation Resistance R _i °C	≥5.000 MΩ · μF (20°C, 100 V _{DC} , 1min)
Max. Overvoltage	1,1 * U_{N} (30% of on-load-duration) 1,15 * U_{N} (30 min/day) 1,2 * U_{N} (5 min/day) 1,3 * U_{N} (1 min/day) 1,5 * U_{N} (30ms every time, 100 ms/day)
Max. Torque of terminals	M6: 4Nm M8: 6Nm
Max. Torque of stud	M12: 10Nm
Life Expectancy	100.000 hours (UR, $\theta_{\text{hotspot}} = 70^\circ\text{C}$)
Failure Rate	100 FIT

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant.

The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

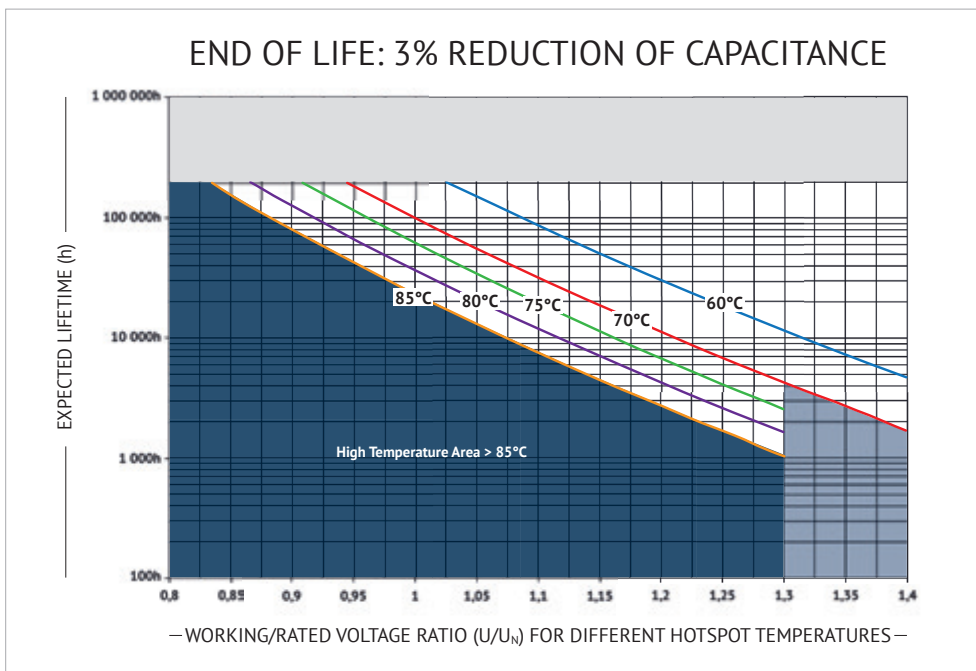
UL94-V0:

Plastic & Compound Mass

UL810:

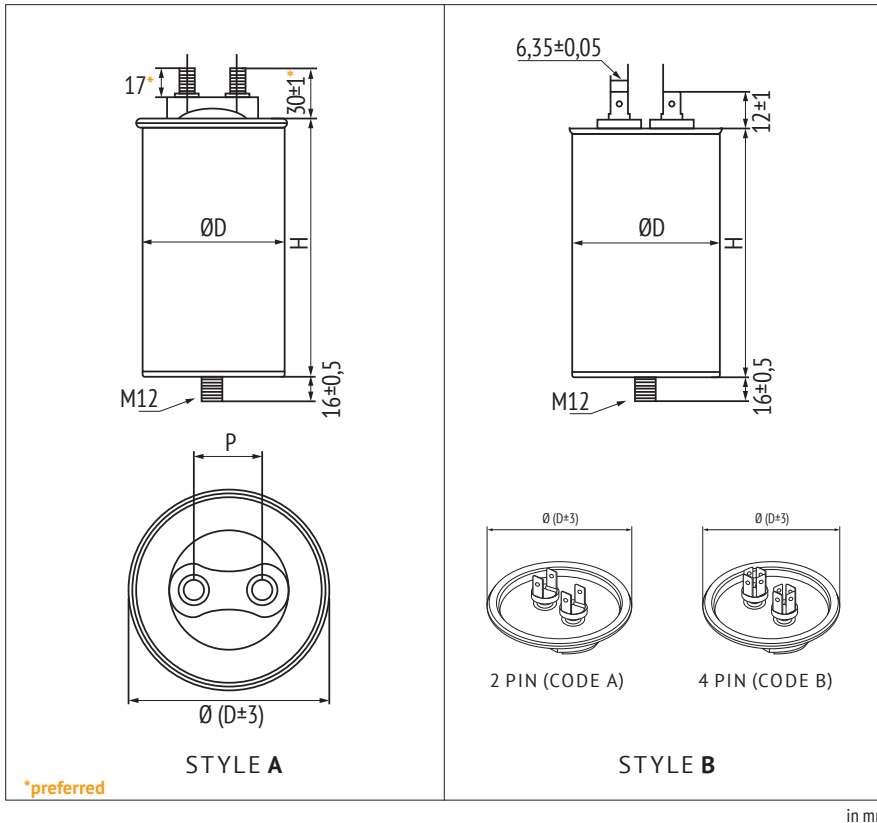
CYWT2.E483921

LIFETIME



AC

DIMENSIONS AND CAN STYLE



CAUTION
The style has impact on the current.

MARKING

	BRAND
CBB 237	SERIES DESIGNATION
200µF ±10%	CAPACITANCE AND TOLERANCE
$U_R = 250V_{AC}$ SH	U_R RATED VOLTAGE
$U_{TC} = 3000V$ 50/60 HZ	U_{TC} VOLTAGE BETWEEN TERMINALS AND CASE, FREQUENCY
-40~+70°C IEC61071	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
J37F35	DATE CODE

ORDER CODE

FC	C	4F	AQ	107	K	L	055	3	X	1	A	E 3	
Capacitor type	Product shape	AC rated voltage code (V)	Series code	Capacitance Code Examples (µF)	Capacitance tolerance	Diameter (mm)	Height (mm)	Terminal Style	Terminal Pitch (mm)	Stud Bolt Mounting	Can Style	For internal use	
Film Cap. = FC	cylindrical = C	250 2F 330 3D 450 4F 480 4J 550 5F 600 6A 660 6G 690 6K	CBB 237 = AQ	10 106 80 806 100 107 150 157 350 357 450 457	±5% J ±10% K	50 D 55 C 60 F 63,5 E 65 G 76 H 86 L 96 W 106 K	75 075 100 100 125 125 200 200 247 247	Male M6*10 Male M6*20 Male M8*10 Male M8*16 Male M8*20 Male M10*10 Male M10*16 Male M10*20 2 Pin 4 Pin	0 1 2 9 3 4 7 5 A B	13,5 X 16 Z 18 Y 20 W 30 6 32 3 35 V 50 5	bolt M12x16 flat, without bracket	1 0	Style A A Style B B

RATINGS

U_{RMS}/U_N $\leq 70^\circ C$ (Vac)	C_R (μF)	dV/dt (V/ μs)	I_{max} 50°C 1kHz (A)	$\hat{I}^{(1)}$ (A)	R_s 20°C 1kHz (m Ω)	$R_{th}^{(2)}$ (K/W)	P $\neq 0,5$ (mm)	D $\neq 1,0$ (mm)	H $\neq 2,0$ (mm)	ORDER CODE *# to be defined, see ordering code table (preferred)
250/350 2F	60	16,7	16	999	5,2	12,6	20	50	100	FCC2FAQ606#D100#W1BE3
	80	16,7	16	1332	4,3	11,2	20	50	100	FCC2FAQ806#D100#W1BE3
	100	12,6	16	1260	4,8	10,0	20	50	125	FCC2FAQ107#D125#W1BE3
	120	12,6	16	1512	5,4	9,0	20	55	125	FCC2FAQ127#C125#W1BE3
	150	12,6	16	1890	6,8	7,7	20	60	125	FCC2FAQ157#F125#W1BE3
	150	10,8	32	1620	3,4	7,1	30	76	125	FCC2FAQ157#H125#61AE3
	175	12,6	16	2205	4,8	10,0	20	63,5	125	FCC2FAQ177#E125#W1BE3
	200	11,7	34	2340	3,3	6,2	30	76	125	FCC2FAQ207#H125#61AE3
	230	8,6	33	1978	3,8	5,7	30	76	150	FCC2FAQ237#H150#61AE3
	250	8,6	37	2150	3,1	5,6	30	76	150	FCC2FAQ257#H150#61AE3
	300	8,6	45	2580	2,0	4,7	30	86	150	FCC2FAQ307#L150#61AE3
	330	10,4	45	3432	1,8	4,6	30	86	150	FCC2FAQ337#L150#61AE3
	350	10,4	59	3622	1,6	4,2	30	76	200	FCC2FAQ357#H200#61AE3
	400	10,4	61	4140	1,5	4,2	30	86	200	FCC2FAQ407#L200#61AE3
500	10,8	64	5400	1,5	3,7	30	86	200	FCC2FAQ507#L200#61AE3	
600	8,0	64	4800	1,7	3,3	30	86	250	FCC2FAQ607#L250#61AE3	
330/460 3D	50	16,7	16	832	5,0	11,6	20	50	100	FCC3DAQ506#D100#W1BE3
	60	12,6	16	756	5,6	10,5	20	50	125	FCC3DAQ606#D125#W1BE3
	100	12,6	16	1260	7,9	7,8	20	60	125	FCC3DAQ107#F125#W1BE3
	100	13,1	23	1305	4,7	7,8	30	76	125	FCC3DAQ107#H125#61AE3
	120	7,2	24	864	4,2	7,3	20	63,5	125	FCC3DAQ127#E125#W1BE3
	150	9,0	23	1350	5,4	6,4	30	76	150	FCC3DAQ157#H150#61AE3
	175	8,6	25	1496	4,7	6,1	30	76	150	FCC3DAQ177#H150#61AE3
	200	13,1	50	2610	1,9	4,7	30	76	200	FCC3DAQ207#H200#61AE3
	200	13,1	45	2610	1,8	4,6	30	86	150	FCC3DAQ207#L150#61AE3
	250	8,6	54	2140	1,6	4,5	30	76	200	FCC3DAQ257#H200#61AE3
	300	13,1	59	3915	1,5	4,0	30	86	200	FCC3DAQ307#L200#61AE3
	350	13,1	60	4570	1,5	4,0	30	86	200	FCC3DAQ357#L200#61AE3
	400	8,1	59	3240	1,8	3,3	30	86	250	FCC3DAQ407#L250#61AE3
	450	8,1	60	3645	1,5	4,0	30	86	250	FCC3DAQ457#L250#61AE3
450/630 4F	20	35,0	16	700	6,0	11,1	20	50	75	FCC4FAQ206#D075#W1BE3
	30	23,3	16	700	5,0	11,6	20	50	100	FCC4FAQ306#D100#W1BE3
	33	21,2	16	700	4,5	14,8	20	50	100	FCC4FAQ336#D100#W1BE3
	40	13,5	16	540	4,0	16,6	20	50	100	FCC4FAQ406#D100#W1BE3
	50	10,8	16	540	7,9	7,8	20	60	125	FCC4FAQ506#D125#W1BE3
	50	17,1	25	855	6,0	5,3	30	76	100	FCC4FAQ506#H100#61AE3
	70	13,0	16	907	6,5	10,2	20	60	125	FCC4FAQ706#F125#W1BE3
	80	11,3	16	904	6,0	11,1	20	60	125	FCC4FAQ806#F125#W1BE3
	90	11,3	16	1020	5,0	11,6	20	63,5	125	FCC4FAQ906#E125#W1BE3
	100	10,8	35	1080	4,7	5,0	30	76	150	FCC4FAQ107#H150#61AE3
	150	13,1	40	1957	3,9	4,3	30	86	150	FCC4FAQ157#L150#61AE3
	200	13,5	50	2700	2,5	4,3	30	86	200	FCC4FAQ207#L200#61AE3
	250	8,1	50	2025	2,0	5,3	30	86	200	FCC4FAQ257#L200#61AE3
	300	8,0	50	2400	1,8	5,9	30	86	250	FCC4FAQ307#L250#61AE3
480/675 4J	20	37,5	16	750	7,3	9,1	20	50	75	FCC4JAQ206#D075#W1BE3
	25	30,0	16	750	6,2	10,7	20	50	100	FCC4JAQ256#D100#W1BE3
	30	25,0	16	750	7,1	9,4	20	50	100	FCC4JAQ306#D100#W1BE3
	40	21,3	16	850	8,0	8,3	20	60	100	FCC4JAQ406#F100#W1BE3
	50	17,0	16	850	6,5	10,2	20	55	125	FCC4JAQ506#C125#W1BE3
	50	19,0	29	950	3,2	7,7	30	76	100	FCC4JAQ506#H100#61AE3
	60	17,6	31	1050	2,8	7,2	30	76	125	FCC4JAQ606#H125#61AE3
	70	22,5	29	1575	3,8	6,6	30	76	125	FCC4JAQ706#H125#61AE3
	80	15,3	31	1224	3,5	6,2	30	76	150	FCC4JAQ806#H150#61AE3
	100	17,1	50	1710	1,5	4,8	30	76	200	FCC4JAQ107#H200#61AE3
	150	17,1	59	2565	1,2	4,2	30	76	200	FCC4JAQ157#H200#61AE3
	200	13,1	64	2610	1,2	3,5	30	76	250	FCC4JAQ207#H250#61AE3
	250	11,7	65	2925	1,3	3,1	30	86	250	FCC4JAQ257#L250#61AE3
	550/770 5F	20	30,0	16	600	6,9	9,6	20	50	100
30		25,0	16	750	6,6	10,1	20	50	125	FCC5FAQ306#D125#W1BE3
40		18,8	16	750	6,0	11,1	20	60	125	FCC5FAQ406#F125#W1BE3
50		17,0	16	850	5,5	12,1	20	63,5	125	FCC5FAQ506#E125#W1BE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)



AC

U_{RMS}/U_N $\leq 70^\circ\text{C}$ (V _{AC})	C_R (μF)	dV/dt (V/ μs)	I_{max} 50°C 1kHz (A)	$\bar{i}^{(1)}$ (A)	R_S 20°C 1kHz (m Ω)	$R_{th}^{(2)}$ (K/W)	P $\neq 0,5$ (mm)	D $\neq 1,0$ (mm)	H $\neq 2,0$ (mm)	ORDER CODE *# to be defined, see ordering code table (preferred)
550/770 5F	70	12,9	31	900	3,5	6,0	30	76	150	FCC5FAQ706#H150#61AE3
	80	22,5	52	1800	1,3	5,1	30	76	150	FCC5FAQ806#H150#61AE3
	100	28,2	56	2820	1,1	4,8	30	86	150	FCC5FAQ107#L150#61AE3
	125	22,6	50	2820	2,0	5,3	30	86	200	FCC5FAQ127#L200#61AE3
	150	21,4	53	3210	1,7	3,7	30	86	200	FCC5FAQ157#L200#61AE3
	200	16,1	58	3220	1,4	3,4	30	86	250	FCC5FAQ207#L250#61AE3
	250	14,0	63	3500	1,3	3,0	30	96	250	FCC5FAQ257#W250#61AE3
300	11,7	65	3500	1,2	2,8	30	106	250	FCC5FAQ307#K250#61AE3	
600/850 6A	10	35,0	16	350	9,5	7,0	20	50	75	FCC6AAQ106#D075#W1BE3
	20	25,0	16	500	11,1	6,0	20	50	125	FCC6AAQ206#D125#W1BE3
	25	20,0	16	500	10,5	6,3	20	50	125	FCC6AAQ256#D125#W1BE3
	30	20,0	16	600	9,5	7,0	20	60	125	FCC6AAQ306#F125#W1BE3
	35	20,0	16	700	9,0	7,4	20	60	125	FCC6AAQ356#F125#W1BE3
	40	17,5	16	700	8,5	7,8	20	63,5	125	FCC6AAQ406#E125#W1BE3
	45	15,6	16	700	8,0	8,3	20	65	125	FCC6AAQ456#G125#W1BE3
	50	17,0	41	850	2,0	5,4	30	76	150	FCC6AAQ506#H150#61AE3
660/930 6G	10	40,0	16	400	10,5	6,3	20	50	125	FCC6GAQ106#D125#W1BE3
	12	35,0	16	420	10,0	6,6	20	50	125	FCC6GAQ126#D125#W1BE3
	15	28,0	16	420	9,5	7,0	20	50	125	FCC6GAQ156#D125#W1BE3
	18	25,0	16	450	9,0	7,4	20	50	125	FCC6GAQ186#D125#W1BE3
	20	27,5	16	550	8,5	7,8	20	55	125	FCC6GAQ206#C125#W1BE3
	25	22,0	16	550	8,0	8,3	20	60	125	FCC6GAQ256#F125#W1BE3
	30	25,0	16	750	7,5	8,9	20	65	125	FCC6GAQ306#G125#W1BE3
	35	21,4	30	750	5,6	3,0	30	76	150	FCC6GAQ356#H150#61AE3
	40	22,5	30	900	5,2	3,2	30	76	150	FCC6GAQ406#H150#61AE3
	45	20,0	40	900	5,0	2,2	30	86	150	FCC6GAQ456#L150#61AE3
50	20,0	40	1000	4,7	2,5	30	86	150	FCC6GAQ506#L150#61AE3	
690/980 6K	10	75,0	16	750	9,5	7,0	20	50	125	FCC6KAQ106#D125#W1BE3
	15	50,0	16	750	9,0	7,4	20	50	125	FCC6KAQ156#D125#W1BE3
	20	45,0	16	900	8,5	7,8	20	55	125	FCC6KAQ206#C125#W1BE3
	30	30,0	16	900	8,0	8,3	20	63,5	125	FCC6KAQ306#E125#W1BE3
	40	28,8	25	1150	4,8	5,0	30	76	150	FCC6KAQ406#H150#61AE3
	50	23,0	30	1150	4,3	4,0	30	86	150	FCC6KAQ506#L150#61AE3
	70	18,0	30	1260	3,7	4,5	30	76	250	FCC6KAQ706#H250#61AE3
	85	18,0	50	1530	2,0	3,0	30	86	250	FCC6KAQ856#L250#61AE3
	100	18,0	53	1800	1,8	3,4	30	86	250	FCC6KAQ107#L250#61AE3
	125	12,5	50	1560	1,8	3,3	30	106	250	FCC6KAQ127#K250#61AE3
	150	12,5	59	1875	1,4	3,0	30	106	250	FCC6KAQ157#K250#61AE3
	170	12,5	59	2125	1,2	3,5	30	106	250	FCC6KAQ177#K250#61AE3

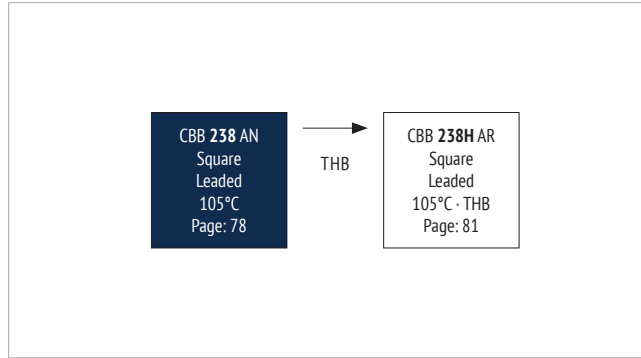
(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

AC

FEATURES

- Used in AC circuits as input or output filter
- Excellent Temperature behavior
- Self-healing
- Plastic box, filled with fire-retardant resin

OVERVIEW



PRODUCT



APPLICATIONS

- Solar inverters
- UPS Power Supply
- Motor Drive systems

CHARACTERISTICS

ITEM	CHARACTERISTICS
Reference Standard	GB/T 17702 (IEC 61071)
Climatic Category	40/105/56
Operating Temperature Range	-40 ~ +105 °C ($\theta_{\text{hotspot}} \leq 105$ °C) $\theta_{\text{hotspot}} = 85 \sim 105$ °C; See Voltage Derating Diagram
Storage Temperature Range	-40 ~ +105 °C
Rated Voltage U_{RMS}	160 ~ 450 V _{AC}
Capacitance Range	0,22 ~ 50 μF
Capacitance Tolerance	$\pm 5\%$ (J), $\pm 10\%$ (K)
U_{TT} Voltage between Terminals	$2,15 \times U_{\text{N}}$ (V _{DC}), 10s (20 °C)
U_{TC} Voltage between Terminals & Case	$\geq 3.000V_{\text{AC}}$, 10s (20 °C, 50 Hz)
Dielectric Dissipation Factor δ_0	$\leq 2 \times 10^{-4}$
Insulation Resistance R _i *°C	$\geq 10.000 \text{ M}\Omega \cdot \mu\text{F}$ (20 °C, 100 V _{DC} , 1min)
Max. Overvoltage	1,1 * U _{NDC} (30 % of time under load) 1,15 * U _{NDC} (30 min. per day) 1,2 * U _{NDC} (5 min. per day) 1,3 * U _{NDC} (1 min. per day) 1,5 * U _{NDC} (max. 30 ms, 100ms per day)
Life Expectancy	100.000 hours ($U_{\text{RMS}}, \theta_{\text{hotspot}} = 70$ °C)
Failure Rate	100 FIT

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant.

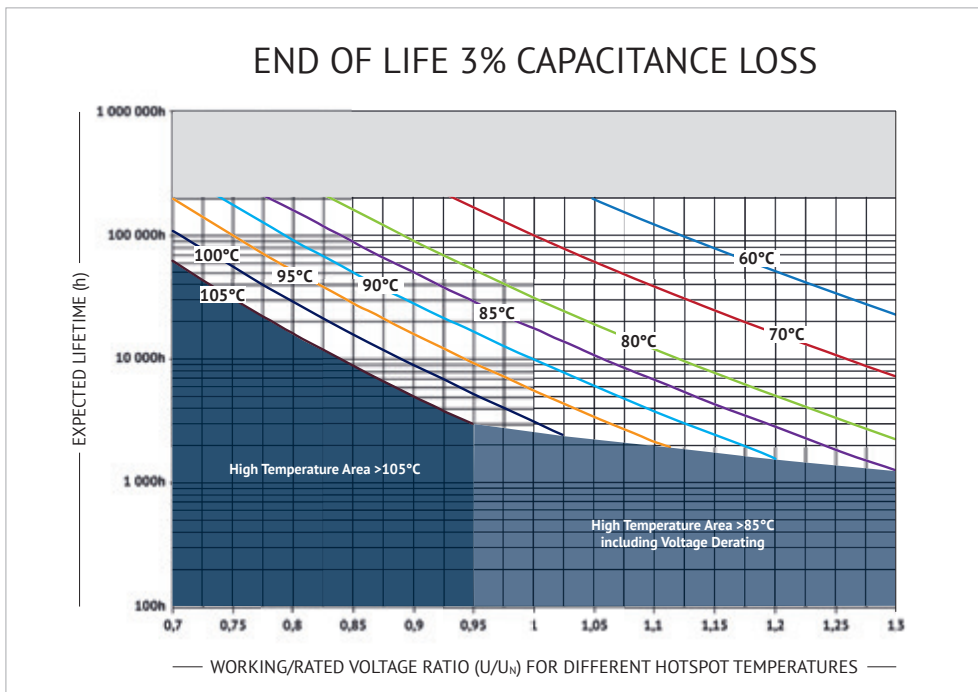
The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

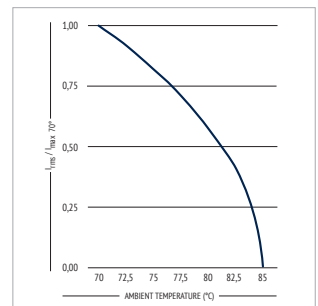
UL94-V0:

Plastic & Compound Mass

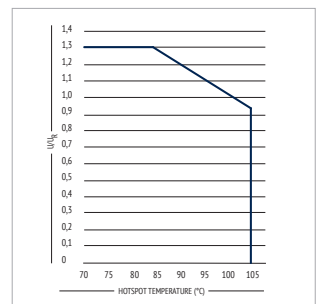
LIFETIME



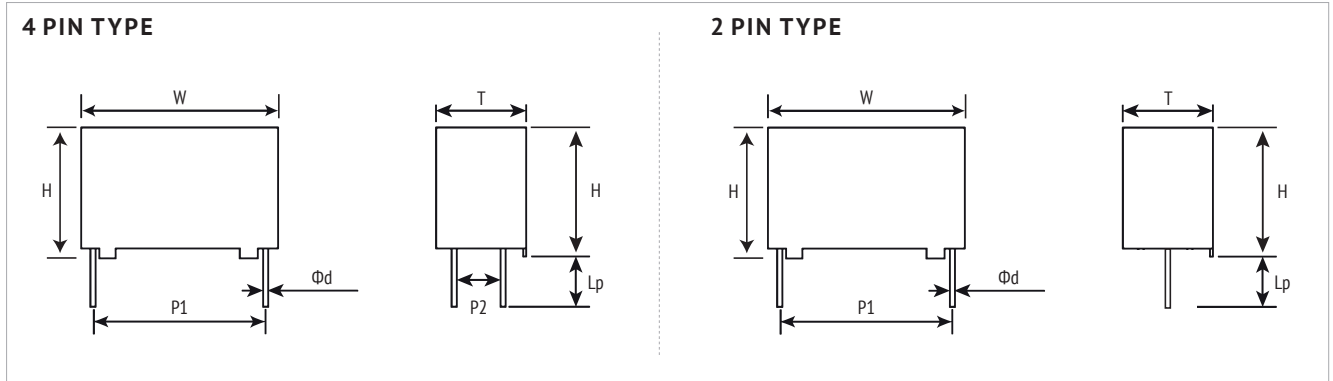
CURRENT DERATING



VOLTAGE DERATING



DIMENSIONS AND CAN STYLE



MARKING

	BRAND
CBB 238	PRODUCT SERIES
5μF J 250V	CAPACITANCE AND TOLERANCE
J02F12	DATE CODE

ORDER CODE

FC	S	2F	AN	105	K	A	F1	37	20	C	E 3
Capacitor type	Product shape	AC rated voltage code (V)	Series code	Capacitance Code (μF)	Capacitance tolerance	Pin Style (mm)	Dimension Code (mm) W x H x T	Pitch P ₁ (mm)	Pitch P ₂ (mm)	Leadwire Diameter Ød	For internal use
Film Cap. = FC	Square Box = S	160 1G 250 2F 275 2H 350 3F 400 4A 450 4F	CBB 238 = AN	1,0 105 4,7 475 15,0 156 50,0 506	±5% J ±10% K	4 Pin Lp = 8mm K 4 Pin Lp = 5mm A 4 Pin Lp = 4,5mm L 4 Pin Lp = 4mm S 4 Pin Lp = 3,5mm J 2 Pin long leads (~ 20mm) C 2 Pin Lp = 5mm B 2 Pin Lp = 4,5mm T 2 Pin Lp = 4,0mm M 2 Pin Lp = 3,5mm U 2 Pin Lp = 3,2mm V	32 x 20 x 11 I4 32 x 22 x 13 I7 32 x 28 x 14 IC 32 x 33 x 18 IF 32 x 37 x 22 II 42,5 x 37 x 28 F1 42,5 x 40 x 20 F2 42,5 x 45 x 30 FF 57,5 x 45 x 30 HH 57,5 x 50 x 35 HL	27,5 27 37,5 37 52,5 52	10,2 10 20,3 20 - 00	0,6 A 0,8 B 1,0 C 1,2 D 0,5 E	

AC

RATINGS

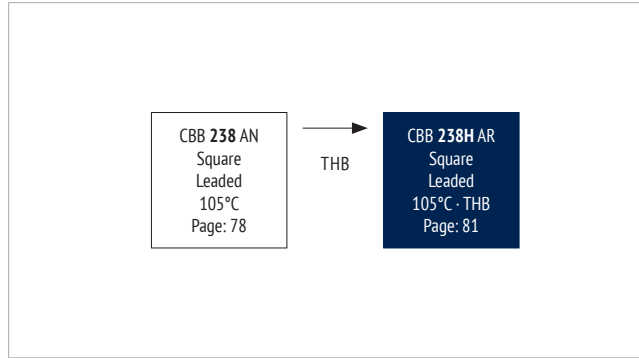
U _{RMS} /U _N ≤85°C (V _{Ac})	U _{DC} (V _{DC})	C _R (μF)	I _{max}			I ⁽¹⁾ (A)	R _s 20°C 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	dV/dt 20°C (V/μS)	L _s (nH)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P ₁ ±0,5 (mm)	P ₂ ±0,5 (mm)	Ød ±0,05 (mm)	ORDER CODE *#* to be defined, see ordering code table
			70°C, 1kHz	60°C, 1kHz	≤50°C, 1kHz												
160/225 1G	400	1	5	6	7	32	30,3	19,8	32	24	32	20	11	27,5	\	0,8	FCS1GAN105##I42700BE3
		2,2	7	9	10	70	15,3	20,0	32	24	32	20	11	27,5	\	0,8	FCS1GAN225##I42700BE3
		3,3	7	9	10	105	11,3	27,1	32	24	32	22	13	27,5	\	0,8	FCS1GAN335##I72700BE3
		5	7	9	10	160	8,8	34,8	32	26	32	28	14	27,5	\	0,8	FCS1GAN505##IC2700BE3
		10	7	9	10	320	6,8	45,0	32	26	32	33	18	27,5	\	0,8	FCS1GAN106##IF2700BE3
		10	12	15	18	220	7,2	14,5	22	30	42,5	37	28	37,5	10,2	1	FCS1GAN106##F13710CE3
		20	12	15	18	440	6,9	15,1	22	30	42,5	37	28	37,5	10,2	1	FCS1GAN206##F13710CE3
		30	12	15	18	660	7,4	14,1	22	30	42,5	45	30	37,5	20,3	1,2	FCS1GAN306##FF3720DE3
		40	12	15	18	640	7,6	13,7	16	35	57,5	45	30	52,5	20,3	1,2	FCS1GAN406##HH5220DE3
50	12	15	18	800	7,5	13,9	16	35	57,5	50	35	52,5	20,3	1,2	FCS1GAN506##HL5220DE3		
250/350 2F	475	1,5	8	10	12	60	10,0	23,4	40	24	32	20	11	27,5	\	0,8	FCS2FAN155##I42700BE3
		2	9	11	12	80	8,2	22,6	40	24	32	22	13	27,5	\	0,8	FCS2FAN205##I72700BE3
		3,3	9	11	12	132	6,2	29,9	40	26	32	28	14	27,5	\	0,8	FCS2FAN335##IC2700BE3
		5	9	11	12	200	5,2	35,6	40	26	32	33	18	27,5	\	0,8	FCS2FAN505##IF2700BE3
		6,8	12	12	12	272	4,9	15,6	40	28	32	37	22	27,5	\	0,8	FCS2FAN685##II2700BE3
		10	14	18	21	300	5,6	13,7	30	30	42,5	40	20	37,5	10,2	1	FCS2FAN106##F23710CE3
		15	14	18	21	450	5,2	14,7	30	30	42,5	37	28	37,5	10,2	1	FCS2FAN156##F13710CE3
		20	14	18	21	600	4,8	15,9	30	30	42,5	45	30	37,5	20,3	1,2	FCS2FAN206##FF3720DE3
		25	14	18	21	625	5,7	13,4	25	35	57,5	45	30	52,5	20,3	1,2	FCS2FAN256##HH5220DE3
		30	14	18	21	750	5,3	14,4	25	35	57,5	45	30	52,5	20,3	1,2	FCS2FAN306##HH5220DE3
35	14	18	21	875	5,5	13,9	25	35	57,5	50	35	52,5	20,3	1,2	FCS2FAN356##HL5220DE3		
40	14	18	21	1000	5,2	14,7	25	35	57,5	50	35	52,5	20,3	1,2	FCS2FAN406##HL5220DE3		
275/385 2H	520	3,3	9	11	12	132	6,2	29,9	40	26	32	33	18	27,5	\	0,8	FCS2HAN335##IF2700BE3
		6,8	9	11	12	272	4,7	39,4	40	28	32	37	22	27,5	\	0,8	FCS2HAN685##II2700BE3
		10	14	18	21	300	5,9	13,0	30	30	42,5	40	20	37,5	10,2	1	FCS2HAN106##F23710CE3
		15	14	18	21	450	5,1	15,0	30	30	42,5	45	30	37,5	20,3	1,2	FCS2HAN156##FF3720DE3
		20	14	18	21	500	6,0	12,8	25	35	57,5	45	30	52,5	20,3	1,2	FCS2HAN206##HH5220DE3
30	14	18	21	750	5,3	14,4	25	35	57,5	50	35	52,5	20,3	1,2	FCS2HAN306##HL5220DE3		
350/480 3F	600	1	9	11	12	45	10,9	17,0	45	24	32	22	13	27,5	\	0,8	FCS3FAN105##I72700BE3
		2	9	11	12	90	7,3	25,4	45	26	32	33	18	27,5	\	0,8	FCS3FAN205##IF2700BE3
		2,2	9	11	12	99	6,9	26,8	45	26	32	33	18	27,5	\	0,8	FCS3FAN225##IF2700BE3
		3,3	9	11	12	148	5,7	32,5	45	28	32	37	22	27,5	\	0,8	FCS3FAN335##II2700BE3
		4,7	14	18	21	159	6,9	11,1	34	30	42,5	40	20	37,5	10,2	1	FCS3FAN475##F23710CE3
		5	14	18	21	170	6,8	11,3	34	30	42,5	40	20	37,5	10,2	1	FCS3FAN505##F23710CE3
		6,8	14	18	21	231	6,2	12,3	34	30	42,5	37	28	37,5	10,2	1	FCS3FAN685##F13710CE3
		10	14	18	21	340	5,3	14,4	34	30	42,5	45	30	37,5	20,3	1,2	FCS3FAN106##FF3720DE3
12	14	18	21	336	6,8	11,3	28	35	57,5	45	30	52,5	20,3	1,2	FCS3FAN126##HH5220DE3		
20	14	18	21	560	5,9	13,0	28	35	57,5	50	35	52,5	20,3	1,2	FCS3FAN206##HL5220DE3		
400/560 4A	700	1	9	11	12	50	10,3	18,0	50	26	32	28	14	27,5	\	0,8	FCS4AAN105##IC2700BE3
		1,5	9	11	12	75	8,1	22,9	50	26	32	33	18	27,5	\	0,8	FCS4AAN155##IF2700BE3
		2,2	9	11	12	110	6,4	28,9	50	26	32	33	18	27,5	\	0,8	FCS4AAN225##IF2700BE3
		3	9	11	12	150	5,7	32,5	50	28	32	37	22	27,5	\	0,8	FCS4AAN305##II2700BE3
		5	14	18	21	200	6,2	12,3	40	30	42,5	37	28	37,5	10,2	1	FCS4AAN505##F13710CE3
		10	14	18	21	350	6,9	11,1	35	35	57,5	45	30	52,5	20,3	1,2	FCS4AAN106##HH5220DE3
15	14	18	21	525	6,1	12,5	35	35	57,5	50	35	52,5	20,3	1,2	FCS4AAN156##HL5220DE3		
450/630 4F	750	0,47	8	10	12	25	15,7	14,9	55	24	32	22	13	27,5	\	0,8	FCS4FAN474##I72700BE3
		1	8	10	12	55	9,2	25,5	55	26	32	33	18	27,5	\	0,8	FCS4FAN105##IF2700BE3
		1,5	8	10	12	82	7,3	32,1	55	28	32	37	22	27,5	\	0,8	FCS4FAN155##II2700BE3
		3,3	14	18	21	148	7,4	10,3	45	30	42,5	37	28	37,5	10,2	1	FCS4FAN335##F13710CE3
		4,7	14	18	21	211	6,2	12,3	45	30	42,5	45	30	37,5	20,3	1,2	FCS4FAN475##FF3720DE3
		6,8	14	18	21	258	7,5	10,2	38	35	57,5	45	30	52,5	20,3	1,2	FCS4FAN685##HH5220DE3
		10	14	18	21	380	6,6	11,6	38	35	57,5	50	35	52,5	20,3	1,2	FCS4FAN106##HL5220DE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

FEATURES

- Used in AC circuits as input or output filter
- Excellent Temperature behavior
- Self-healing
- Plastic box, filled with fire-retardant resin

OVERVIEW



PRODUCT



APPLICATIONS

- Solar inverters
- UPS Power Supply
- Motor Drive systems

CHARACTERISTICS

ITEM	CHARACTERISTICS
Reference Standard	GB/T 17702 (IEC 61071)
Climatic Category	40/105/56
Operating Temperature Range	-40 ~ +105 °C ($\theta_{\text{hotspot}} \leq 105$ °C) $\theta_{\text{hotspot}} = 85$ ~105°C; See Voltage Derating Diagram
Storage Temperature Range	-40 ~ +105°C
Rated Voltage U_{RMS}	160 ~ 450 V _{AC}
Capacitance Range	0,22 ~ 50µF
Capacitance Tolerance	±5% (J), ±10% (K)
U_{TT} Voltage between Terminals	2,15x U_{N} (V _{DC}), 10s (20°C)
U_{TC} Voltage between Terminals & Case	≥ 3.000V _{AC} , 10s (20°C, 50 Hz)
Dielectric Dissipation Factor δ_0	≤ 2x10 ⁻⁴
Insulation Resistance R _i °C	≥ 10.000 MΩ · µF (20°C, 100 V _{DC} , 1min)
Max. Overvoltage	1,1 * U _{NDC} (30% of time under load) 1,15 * U _{NDC} (30 min. per day) 1,2 * U _{NDC} (5 min. per day) 1,3 * U _{NDC} (1 min. per day) 1,5 * U _{NDC} (max. 30 ms, 100ms per day)
Life Expectancy	100.000 hours (U_{R} , $\theta_{\text{hotspot}} = 70$ °C)
Failure Rate	100 FIT

ENVIRONMENTAL

The products are RoHS, WEEE and REACH compliant.

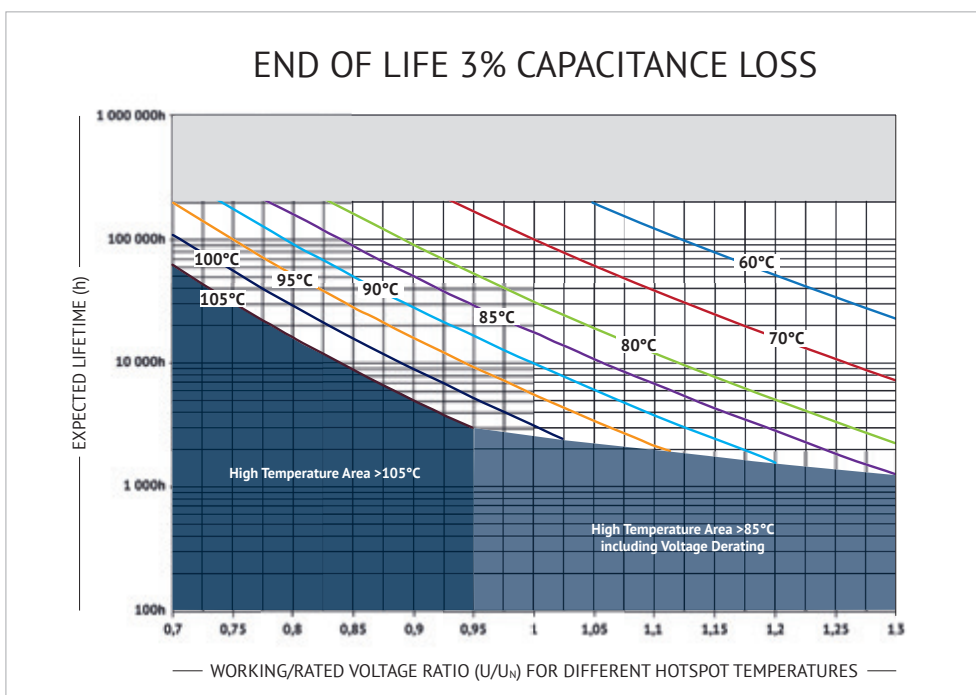
The detailed version please see separate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

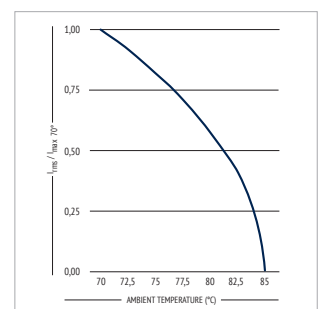
UL94-V0:

Plastic & Compound Mass

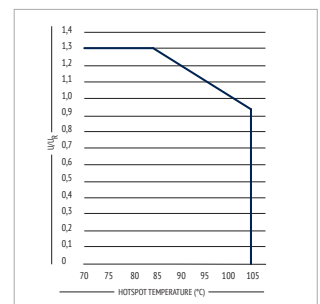
LIFETIME



CURRENT DERATING



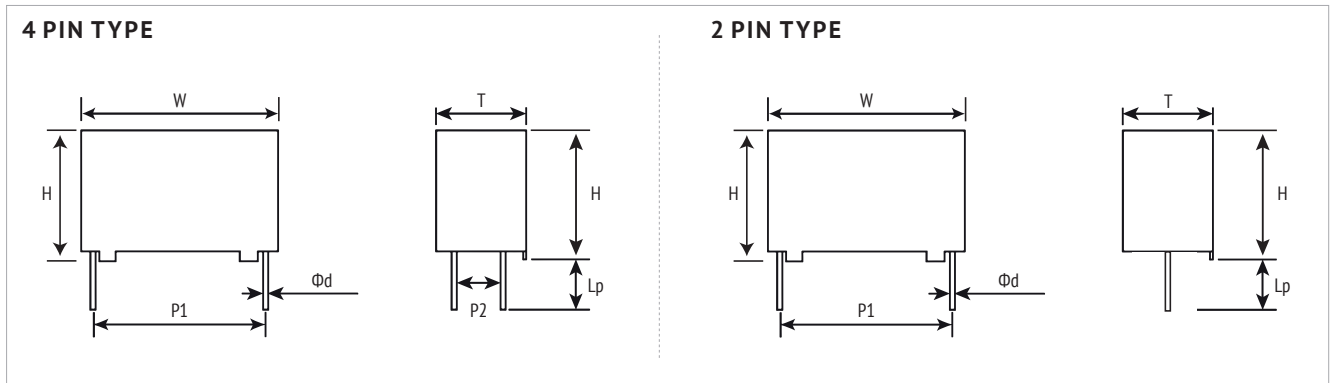
VOLTAGE DERATING



THB: HIGH TEMPERATURE & HUMIDITY TEST

Temperature:	85°C ± 2°C
Humidity:	85°C ± 2°C
Loading Voltage:	U _R (50Hz/60Hz)
Duration:	1.000 hours
Capacity Change (ΔC/C):	≤ 10%

DIMENSIONS AND CAN STYLE



MARKING

	BRAND
CBB 238H	PRODUCT SERIES
5μF J 250V	CAPACITANCE AND TOLERANCE
J02F12	DATE CODE

ORDER CODE

FC	S	2F	AR	105	K	A	F1	37	20	C	G	E3
Capacitor type	Product shape	AC rated voltage code (V)	Series code	Capacitance Code (μF)	Capacitance tolerance	Pin Style (mm)	Dimension Code (mm) W x H x T	Pitch P ₁ (mm)	Pitch P ₂ (mm)	Leadwire Diameter Ød		For internal use
Film Cap. = FC	Square Box = S	160 1G 250 2F 275 2H 350 3F 400 4A 450 4F	CBB 238H = AR	1,0 105 4,7 475 15,0 156 50,0 506	±5% J ±10% K	4 Pin Lp = 8mm K 4 Pin Lp = 5mm A 4 Pin Lp = 4,5mm L 4 Pin Lp = 4mm S 4 Pin Lp = 3,5mm J 2 Pin long leads (~ 20mm) C 2 Pin Lp = 5mm B 2 Pin Lp = 4,5mm T 2 Pin Lp = 4,0mm M 2 Pin Lp = 3,5mm U 2 Pin Lp = 3,2mm V	32 x 20 x 11 I4 32 x 22 x 13 I7 32 x 28 x 14 IC 32 x 33 x 18 IF 32 x 37 x 22 II 42,5 x 37 x 28 F1 42,5 x 40 x 20 F2 42,5 x 45 x 30 FF 57,5 x 45 x 30 HH 57,5 x 50 x 35 HL	27,5 27 37,5 37 52,5 52	10,2 10 20,3 20 -	0,8 B 1,0 C 1,2 D		

AC

RATINGS

U _{RMS} /U _N ≤85°C (V _{Ac})	U _{NDc} (V _{Dc})	C _R (μF)	I _{max}			I ⁽¹⁾ (A)	R _s 20°C 1kHz (mΩ)	R _{th} ⁽²⁾ (K/W)	dV/dt 20°C (V/μS)	L _s (nH)	W ±1,0 (mm)	H ±1,0 (mm)	T ±1,0 (mm)	P ₁ ±0,5 (mm)	P ₂ ±0,5 (mm)	Ød ±0,05 (mm)	ORDER CODE *# to be defined, see ordering code table
			70°C, 1kHz	60°C, 1kHz	≤50°C, 1kHz												
160/225 1G	400	1	5	6,4	7,6	32	30,3	19,8	32	24	32	20	11	27,5	\	0,8	FCS1GAR105##I42700BGE3
		2,2	7	9	10,6	70	15,3	20,0	32	24	32	20	11	27,5	\	0,8	FCS1GAR225##I42700BGE3
		3,3	7	9	10,6	105	11,3	27,1	32	24	32	22	13	27,5	\	0,8	FCS1GAR335##I72700BGE3
		5	7	9	10,6	160	8,8	34,8	32	26	32	28	14	27,5	\	0,8	FCS1GAR505##IC2700BGE3
		10	7	9	10,6	320	6,8	45,0	32	26	32	33	18	27,5	\	0,8	FCS1GAR106##IF2700BGE3
		10	12	15,4	18,3	220	7,2	14,5	22	30	42,5	37	28	37,5	10,2	1	FCS1GAR106##F13710CGE3
		20	12	15,4	18,3	440	6,9	15,1	22	30	42,5	37	28	37,5	10,2	1	FCS1GAR206##F13710CGE3
		30	12	15,4	18,3	660	7,4	14,1	22	30	42,5	45	30	37,5	20,3	1,2	FCS1GAR306##FF3720DGE3
		40	12	15,4	18,3	640	7,6	13,7	16	35	57,5	45	30	52,5	20,3	1,2	FCS1GAR406##HHS220DGE3
50	12	15,4	18,3	800	7,5	13,9	16	35	57,5	50	35	52,5	20,3	1,2	FCS1GAR506##HLS220DGE3		
250/350 2F	475	1,5	8	10,3	12	60	10,0	23,4	40	24	32	20	11	27,5	\	0,8	FCS2FAR155##I42700BGE3
		2	9	11,6	12	80	8,2	22,6	40	24	32	22	13	27,5	\	0,8	FCS2FAR205##I72700BGE3
		3,3	9	11,6	12	132	6,2	29,9	40	26	32	28	14	27,5	\	0,8	FCS2FAR335##IC2700BGE3
		5	9	11,6	12	200	5,2	35,6	40	26	32	33	18	27,5	\	0,8	FCS2FAR505##IF2700BGE3
		6,8	12	12	12	272	4,9	15,6	40	28	32	37	22	27,5	\	0,8	FCS2FAR685##I12700BGE3
		10	14	18	21,3	300	5,6	13,7	30	30	42,5	40	20	37,5	10,2	1	FCS2FAR106##F23710CGE3
		15	14	18	21,3	450	5,2	14,7	30	30	42,5	37	28	37,5	10,2	1	FCS2FAR156##F13710CGE3
		20	14	18	21,4	600	4,8	15,9	30	30	42,5	45	30	37,5	20,3	1,2	FCS2FAR206##FF3720DGE3
		25	14	18	21,4	625	5,7	13,4	25	35	57,5	45	30	52,5	20,3	1,2	FCS2FAR256##HHS220DGE3
		30	14	18	21,4	750	5,3	14,4	25	35	57,5	45	30	52,5	20,3	1,2	FCS2FAR306##HHS220DGE3
35	14	18	21,3	875	5,5	13,9	25	35	57,5	50	35	52,5	20,3	1,2	FCS2FAR356##HLS220DGE3		
40	14	18	21,3	1000	5,2	14,7	25	35	57,5	50	35	52,5	20,3	1,2	FCS2FAR406##HLS220DGE3		
275/385 2H	520	3,3	9	11,6	12	132	6,2	29,9	40	26	32	33	18	27,5	\	0,8	FCS2HAR335##IF2700BGE3
		6,8	9	11,6	12	272	4,7	39,4	40	28	32	37	22	27,5	\	0,8	FCS2HAR685##I12700BGE3
		10	14	18	21,3	300	5,9	13,0	30	30	42,5	40	20	37,5	10,2	1	FCS2HAR106##F23710CGE3
		15	14	18	21,3	450	5,1	15,0	30	30	42,5	45	30	37,5	20,3	1,2	FCS2HAR156##FF3720DGE3
		20	14	18	21,3	500	6,0	12,8	25	35	57,5	45	30	52,5	20,3	1,2	FCS2HAR206##HHS220DGE3
30	14	18	21,4	750	5,3	14,4	25	35	57,5	50	35	52,5	20,3	1,2	FCS2HAR306##HLS220DGE3		
350/480 3F	600	1	9	11,6	12	45	10,9	17,0	45	24	32	22	13	27,5	\	0,8	FCS3FAR105##I72700BGE3
		2	9	11,6	12	90	7,3	25,4	45	26	32	33	18	27,5	\	0,8	FCS3FAR205##IF2700BGE3
		2,2	9	11,6	12	99	6,9	26,8	45	26	32	33	18	27,5	\	0,8	FCS3FAR225##IF2700BGE3
		3,3	9	11,6	12	148	5,7	32,5	45	28	32	37	22	27,5	\	0,8	FCS3FAR335##I12700BGE3
		4,7	14	18	21,3	159	6,9	11,1	34	30	42,5	40	20	37,5	10,2	1	FCS3FAR475##F23710CGE3
		5	14	18	21,3	170	6,8	11,3	34	30	42,5	40	20	37,5	10,2	1	FCS3FAR505##F23710CGE3
		6,8	14	18,1	21,4	231	6,2	12,3	34	30	42,5	37	28	37,5	10,2	1	FCS3FAR685##F13710CGE3
		10	14	18	21,4	340	5,3	14,4	34	30	42,5	45	30	37,5	20,3	1,2	FCS3FAR106##FF3720DGE3
12	14	18	21,3	336	6,8	11,3	28	35	57,5	45	30	52,5	20,3	1,2	FCS3FAR126##HHS220DGE3		
20	14	18	21,3	560	5,9	13,0	28	35	57,5	50	35	52,5	20,3	1,2	FCS3FAR206##HLS220DGE3		
400/560 4A	700	1	9	11,6	12	50	10,3	18,0	50	26	32	28	14	27,5	\	0,8	FCS4AAR105##IC2700BGE3
		1,5	9	11,6	12	75	8,1	22,9	50	26	32	33	18	27,5	\	0,8	FCS4AAR155##IF2700BGE3
		2,2	9	11,6	12	110	6,4	28,9	50	26	32	33	18	27,5	\	0,8	FCS4AAR225##IF2700BGE3
		3	9	11,6	12	150	5,7	32,5	50	28	32	37	22	27,5	\	0,8	FCS4AAR305##I12700BGE3
		5	14	18,1	21,4	200	6,2	12,3	40	30	42,5	37	28	37,5	10,2	1	FCS4AAR505##F13710CGE3
		10	14	18	21,3	350	6,9	11,1	35	35	57,5	45	30	52,5	20,3	1,2	FCS4AAR106##HHS220DGE3
15	14	18,1	21,4	525	6,1	12,5	35	35	57,5	50	35	52,5	20,3	1,2	FCS4AAR156##HLS220DGE3		
450/630 4F	750	0,47	8	10,3	12	25	15,7	14,9	55	24	32	22	13	27,5	\	0,8	FCS4FAR474##I72700BGE3
		1	8	10,3	12	55	9,2	25,5	55	26	32	33	18	27,5	\	0,8	FCS4FAR105##IF2700BGE3
		1,5	8	10,3	12	82	7,3	32,1	55	28	32	37	22	27,5	\	0,8	FCS4FAR155##I12700BGE3
		3,3	14	18,1	21,4	148	7,4	10,3	45	30	42,5	37	28	37,5	10,2	1	FCS4FAR335##F13710CGE3
		4,7	14	18,1	21,4	211	6,2	12,3	45	30	42,5	45	30	37,5	20,3	1,2	FCS4FAR475##FF3720DGE3
		6,8	14	18	21,3	258	7,5	10,2	38	35	57,5	45	30	52,5	20,3	1,2	FCS4FAR685##HHS220DGE3
		10	14	18	21,3	380	6,6	11,6	38	35	57,5	50	35	52,5	20,3	1,2	FCS4FAR106##HLS220DGE3

(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)