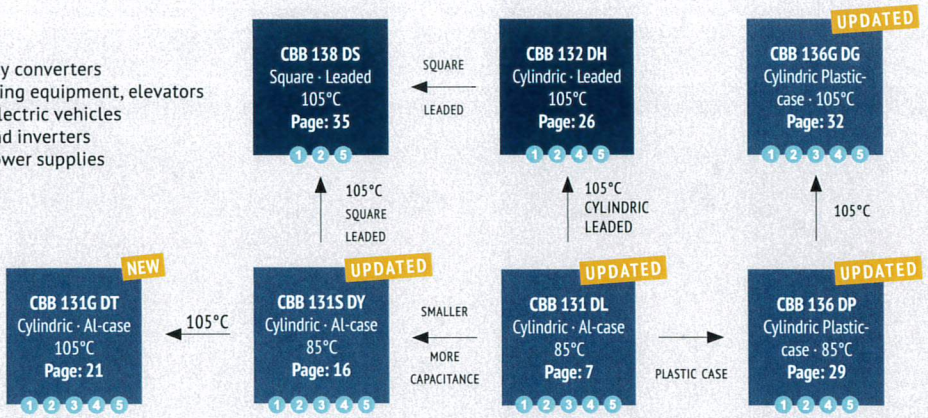
DC-LINK

APPLICATIONS:

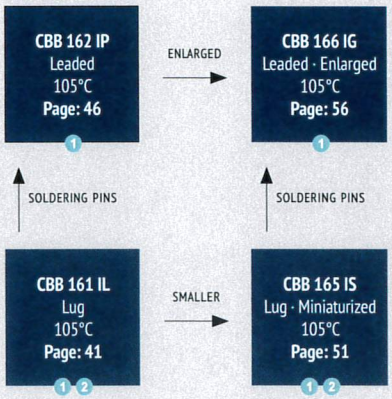
1. High power frequency converters
2. Motion control, welding equipment, elevators
3. Electric and hybrid electric vehicles
4. Photovoltaic and wind inverters
5. Industry high-end power supplies



SNUBBER

APPLICATIONS:

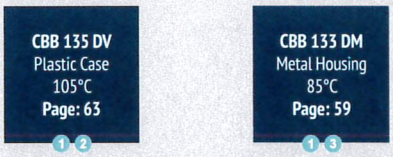
1. High pulse an high frequency circuits
2. IGBT mounting



MODULES

APPLICATIONS:

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



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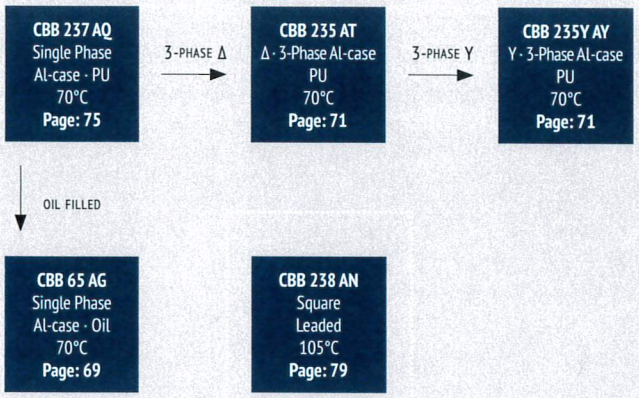
AC FILTER

APPLICATIONS:

AC Filtering



SAFETY

APPLICATIONS:

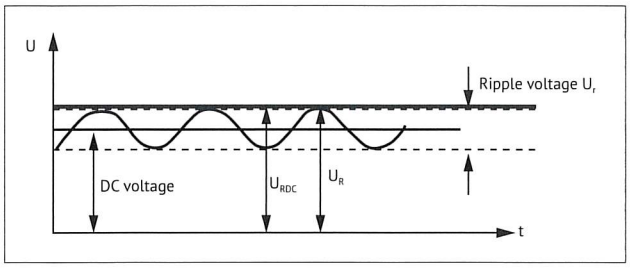
Safety

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.

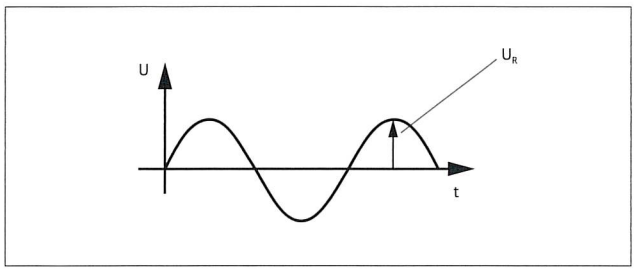
NOMINAL CAPACITANCE C_R Nominal Capacitance is defined at 20°C and 50Hz (120Hz).

RATED VOLTAGE U_R

DC Capacitors: U_{RDC} Maximum operating peak voltage of either polarity but of a non-reversing type waveform, for which the capacitor has been designed, for continuous operation. The maximum DC voltage is the sum of the DC voltage and peak AC voltage.



AC Capacitors: U_{RAC} Maximum operating peak recurrent voltage of either polarity of a reversing type waveform for which the capacitor has been designed.



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. See also Voltage Derating tables.).

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.

OPERATING CURRENT 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.

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. $\hat{I} = C_R * (dV/dt)$

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: $ESR = \tan\delta/(\omega C) = R_s + \tan\delta_o/(\omega C)$

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. $\Theta_{hotspot} = \Theta_{ambient} + P_{loss} * R_{th}$

R_{th}: thermal resistance, P_{loss}: Powerloss $P_{loss} = ESR * I_{rms}^2$, $\Theta_{ambient}$ = 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 to1000Ω/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 to1000Ω/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.

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

ALTITUDE/m	VOLTAGE DERATING COEFFICIENT
≤ 2 000	1,00
2 500	0,95
3 000	0,90
3 500	0,85
4 000	0,80
4 500	0,75
5 000	0,70

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 = $1/10^{-9}$h (1 failure per 10^9 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 , 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*C [µF] in seconds.

VOLTAGE BETWEEN TERMINALS U_{TT} Voltage between terminals.

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

BUZZING 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.

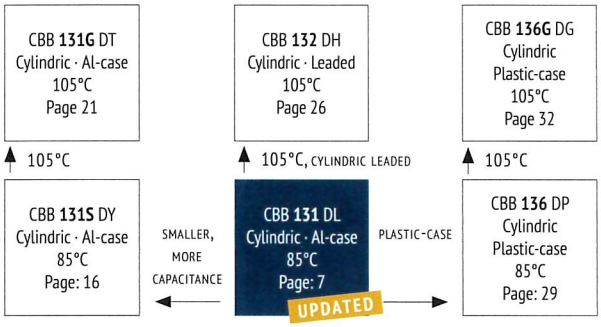
CAUTION & WARNINGS Do not touch the terminals of capacitors. The energy stored in capacitors may be lethal. Ensure that the operating environment of the equipment into which the capacitor has been built, is within the specified conditions. Capacitors must not be used in corrosive atmospheres, particularly 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.

Jianghai Europe GmbH, v4 0922

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	40/85/56 (IEC 61071)
Operating Temperature	–40 ~ +85 °C ($\Theta_{hotspot}$ ≤ 85 °C)
Storage Temperature	–40 ~ +85 °C
Rated Voltage U_{RDC}	600 ~ 3.600V_{DC}
Capacitance Range	44 ~ 7.200 µF
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}	≥ 3.000V_{AC} (20°C, 50Hz, 10s)
Max. Overvoltage	Please see IEC 61071
Insulation Resistance R_i*C	≥ 10.000 MΩ * µF (20 °C, 100 V_{DC}, 1 min)
Dielectric Dissipation Factor tan δ_0	≤ 2 * 10^{-4} (20 °C, 100 Hz)
Life Time Expectancy	≥ 100.000h, failure rate ≤ 50 FIT ($\Theta_{hotspot}$ ≤ 70°C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACh compliant.

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

APPROVALS

UL94-V0:

Plastic & Compound Mass

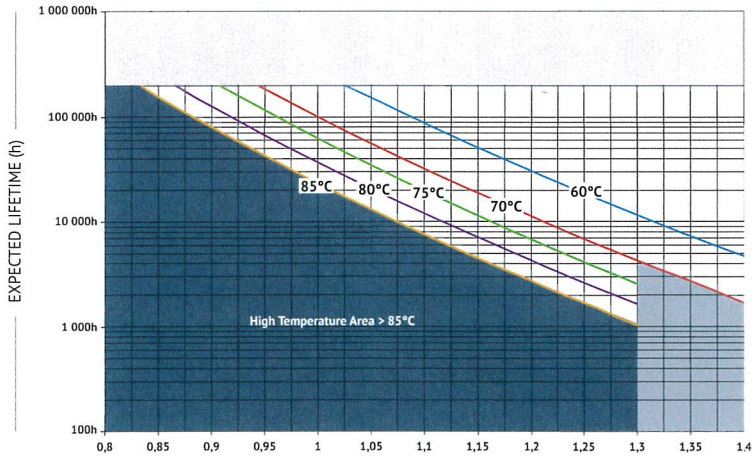
UL810:

CZDS2.E227010 (Construction)

(except Can Style C & P)

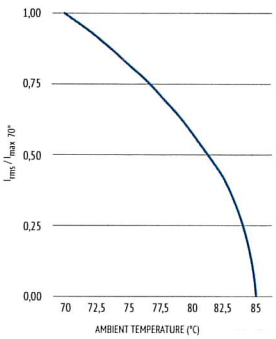
LIFETIME

END OF LIFE: 3% REDUCTION OF CAPACITANCE



— WORKING/RATED VOLTAGE RATIO (U/U_R) FOR DIFFERENT HOTSPOT TEMPERATURES —

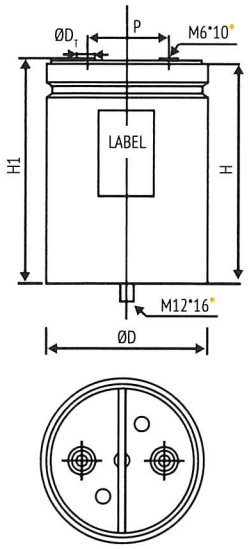
CURRENT DERATING



DC-LINK

CAN STYLES

CAN STYLE A



H1=H+5mm

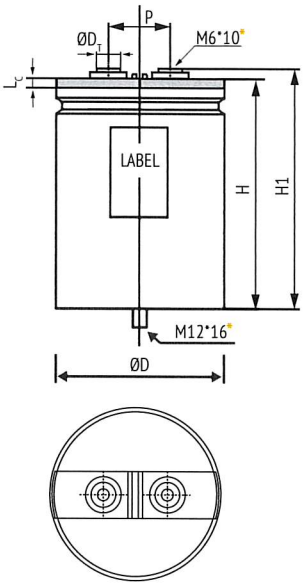
Aluminum Case
with Flanging

D_T = 12mm*

M6*10 screw female*

*preferred

CAN STYLE B UPDATED



H1=H+5mm

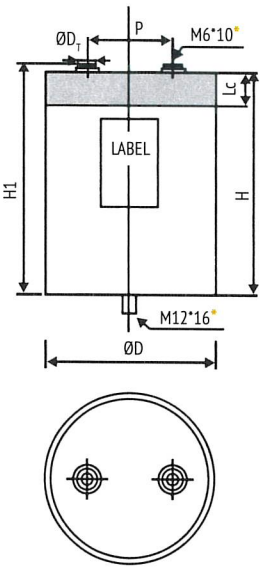
Aluminum Case
with Flanging
Anti-Creep Insulation

D_T = 12mm*

M6*10 screw female*

*preferred

CAN STYLE C



H1=H+5mm

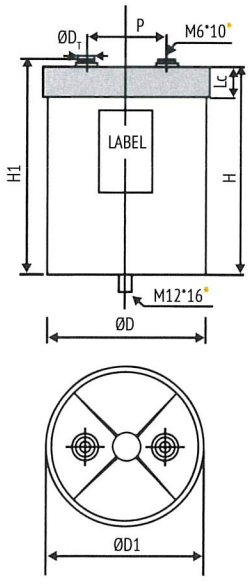
Aluminum/Plastic Case

D_T = 16mm*

M6*10 screw female*
M8*10 screw female

*preferred

CAN STYLE D



H1=H+5mm

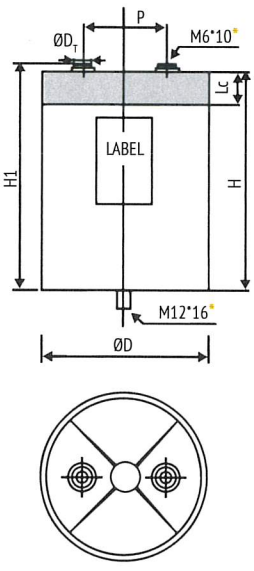
Aluminum/Plastic Case
Enlarged Anti-Creep Insulation

D_T = 12mm*

M6*10 screw female*

*preferred

CAN STYLE E/F/G



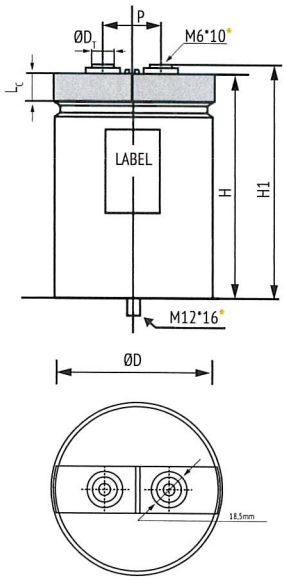
H1=H+5mm

Aluminum/Plastic Case
Anti-Creep Insulation

Can Style **E** D_T = 12mm
Can Style **F** D_T = 14mm
Can Style **G** D_T = 16mm

Can Style **E** M6*10 screw female
Can Style **F** M6*10 screw female
M8*10 screw female
Can Style **G** M8*10 screw female
*preferred M10*10 screw female

CAN STYLE H/I



H1=H+5mm

Aluminum/Plastic Case
with Flanging
Anti-Creep Insulation

Can Style **H/I**: D_T = 14 mm

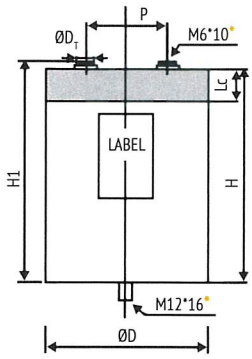
M6*10 screw female*

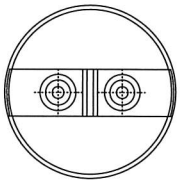
*preferred

in mm

DC-LINK

CAN STYLE J/K





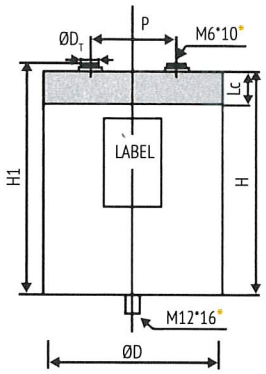
H1=H+5mm

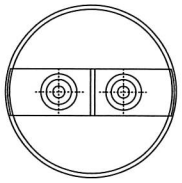
Aluminum/Plastic Case
Anti-Creep Insulation

D_T = 12mm*

M6*10 screw female*

CAN STYLE L/N





H1=H+5mm

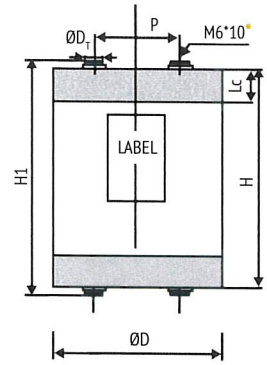
Aluminum/Plastic Case
Anti-Creep Insulation

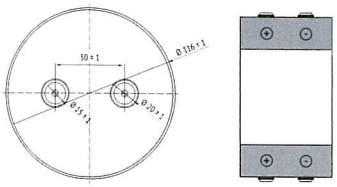
Can Style **L**: D_T = 14 mm
Can Style **N**: D_T = 14 mm

M6*10 screw female*
M8*10 screw female

*preferred

CAN STYLE P





H1=H+5mm

Aluminum/Plastic Case
Double Pole
Anti-Creep Insulation

D_T = 16mm*

M6*10 screw female*

*preferred

in mm

CAN STYLE „X“

OTHER CAN STYLES ON REQUEST

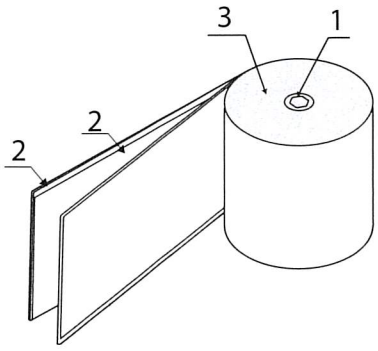
DIMENSIONS

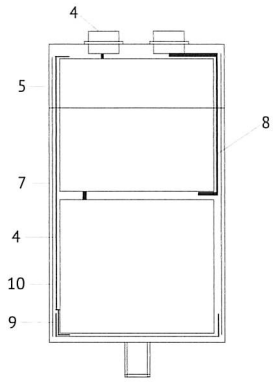
Diameter D ± 1,0 mm	Diameter Cab D1 ± 1,0 mm	Can Style	Pitch P ± 0,5mm	Length Cab Lc ± 1,0 mm	Diameter Terminal D_T ± 0,5mm
76	-	C	32	20	16
76	-	J	32	10	12
76	-	B	32	32	12
85	-	A	32	-	12
86	-	C	32	20	16
86	89	D	32	35	12
86	-	E	32	25	12
86	-	F	32	25	14
86	-	J	32	10	12
86	-	B, K	32	32	12
89	92	D	45	35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

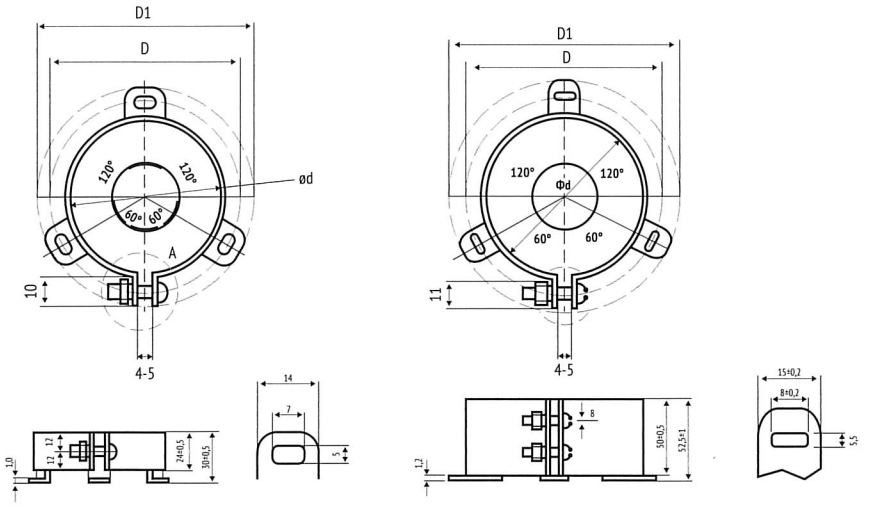




NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn
4	Terminals	Cu, Sn-plated
5	Deck	PC

NO.	ITEM	MATERIAL
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

Jianghai	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	E3
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**	CBB131 **DL**	100 **107**	±5% **J**	76 **H**	95 **095**	Female M5*7 **8**	32 **3**	flat, with Y bracket **Y**	Style A **A**	**1**	
		700 **2Q**		220 **227**	±10% **K**	85 **K**	120 **120**	Female M6*10 **0**	45 **4**	flat, without bracket **0**	Style B **B**	**2**	
		800 **2K**		420 **427**	±20% **M**	86 **L**	136 **136**	Female M8*10 **2**	50 **5**	bolt M12x16 **1**	Style C **C**	**3**	
		900 **R2**		500 **507**		89 **M**	155 **155**	Female M8*12 **6**	60 **6**	bolt M16x25 **2**	Style D **D**		
		1000 **3A**		1000 **108**		96 **W**	175 **175**	Female M10*10 **4**		bolt M12x12 **3**	Style E **E**		
		1100 **A3**		1100 **118**		116 **P**	225 **225**	Female M10*12 **B**			Style F **F**		
		1200 **3B**				136 **T**	230 **230**	Male M6*20 **1**			Style G **G**		
		1300 **03**						Male M8*12 **9**			Style H **H**		
		1500 **C3**						Male M8*15 **A**			Style I **I**		
		1700 **F3**						Male M8*17 **7**			Style J **J**		
		2000 **3D**						Male M8*20 **3**			Style K **K**		
		2200 **D2**						Male M10*20 **5**			Style L **L**		
		2600 **3E**									Style N **N**		
		2800 **L3**									Style P **P**		
		3000 **3F**											
		3200 **3U**											
		3600 **3V**											

RATINGS

U_R	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	R_{th}(2)	L_S	D	H	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°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	480	35	50	61	70	4800	1,6	5,1	≤50	76	95	FCC2SDL487#H095#3##1E3
	650	38,6	55	67	77	5200	1,2	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	32,5	46	56	65	6160	2,2	4,3	≤60	76	136	FCC2SDL777#H136#3##1E3
	880	37	53	65	75	6248	1,5	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	34	49	60	70	6700	1,8	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#5##1E3
	1300	41	58	71	82	7800	1,4	4,3	≤60	85/86	175	FCC2SDL138##175#3##2E3
	1600	44	63	77	89	9600	1,0	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	52	74	90	100	11550	0,8	4,6	≤60	116	155	FCC2SDL218#P155#5##2E3
	2400	50	70	86	99	12000	0,9	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
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

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

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U_R	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	R_{th}(2)	L_S	D	H	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°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)	
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	34	48	59	68	5100	1,8	4,8	≤60	85/86	120	FCC2KDL517##120#3##1E3
	560	37	53	65	75	5600	1,7	4,2	≤60	76	175	FCC2KDL567#H175#3##2E3
	580	33	47	57	65	5800	2,0	4,6	≤60	85/86	136	FCC2KDL587##136#3##1E3
	640	39	55	67	77	6400	1,5	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#5##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	31	44	54	63	5100	2,1	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	31	44	54	62	5800	2,2	4,6	≤60	85/86	136	FCCR2DL587##136#3##1E3
	640	39	55	67	77	6400	1,5	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#5##1E3
	750	38	53	66	76	7500	1,6	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	31	44	54	62	3190	1,8	5,6	≤50	85/86	95	FCC3ADL297##095#3##1E3
	300	27	38	46	54	3300	2,9	4,7	≤60	76	120	FCC3ADL307#H120#3##1E3
	330	25	36	44	51	3630	3,3	4,6	≤60	76	136	FCC3ADL337#H136#3##1E3
	360	35	49	60	69	3960	1,4	4,3	≤60	76	155	FCC3ADL367#H155#3##2E3
	400	30	42	52	60	4400	2,3	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	37	52	65	75	5000	1,6	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#5##1E3
	560	37	52	64	73	5600	1,7	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

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

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U_R	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	R_{th}(2)	L_S	D	H	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°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)	
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	30	41	51	58	3840	2,4	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	35	50	62	71	5760	1,8	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	27	39	48	55	3120	2,7	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
	330	35	50	61	71	3960	1,8	4,4	≤50	85/86	155	FCC3BDL337##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	43	60	74	86	7920	1,2	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	FCCO3DL127#H095#3##1E3
	160	28	39	48	56	1920	2,3	5,6	≤50	85/86	95	FCCO3DL167##095#3##1E3
	160	23	34	42	48	1920	3,7	4,7	≤60	76	120	FCCO3DL167#H120#3##1E3
	180	23	33	40	46	2160	4,1	4,6	≤60	76	136	FCCO3DL187#H136#3##1E3
	210	31	44	54	62	2520	2,4	4,3	≤60	76	155	FCCO3DL217#H155#3##2E3
	220	28	40	49	57	2640	2,6	4,8	≤60	85/86	120	FCCO3DL227##120#3##1E3
	240	29	41	51	58	2880	2,8	4,2	≤60	76	175	FCCO3DL247#H175#3##2E3
	250	27	39	47	55	3000	2,9	4,6	≤60	85/86	136	FCCO3DL257##136#3##1E3
	280	36	52	63	73	3360	1,7	4,4	≤50	85/86	155	FCCO3DL287##155#3##2E3
	310	34	48	59	68	3720	1,6	5,4	≤50	116	95	FCCO3DL317#P095#5##1E3
	320	34	49	61	70	3840	1,9	4,3	≤60	85/86	175	FCCO3DL327##175#3##2E3
	420	33	47	58	67	5040	1,8	5,0	≤60	116	120	FCCO3DL427#P120#5##1E3
	450	33	48	58	67	5400	2,2	4,0	≤60	85/86	225	FCCO3DL457##225#3##2E3
	480	31	44	54	62	5760	2,1	4,9	≤60	116	136	FCCO3DL487#P136#5##1E3
	530	44	63	77	89	6360	1,1	4,6	≤60	116	155	FCCO3DL537#P155#5##2E3
	630	45	64	78	90	7560	1,1	4,5	≤60	116	175	FCCO3DL637#P175#5##2E3
	820	49	70	86	99	9840	1,5	2,7	≤60	116	230	FCCO3DL827#P230#5##2E3
	880	60	85	100	100	10560	1,1	2,5	≤80	136	175	FCCO3DL887#T175#5##2E3
	1200	53	76	93	100	13200	1,2	2,9	≤80	136	230	FCCO3DL128#T230#5##2E3
	1300	62	88	100	100	14300	1,3	2,0	≤80	136	252	FCCO3DL138#T252#5##2E3
	1400	61	87	100	100	15400	1,2	2,2	≤80	116	345	FCCO3DL148#P345#5##3E3
	1900	68	96	100	100	20900	1,2	1,8	≤80	136	345	FCCO3DL198#T345#5##3E3

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

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U_R	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	R_{th}(2)	L_S	D	H	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°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)	
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	25	35	43	50	2880	3,2	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	26	38	46	53	3600	3,0	4,6	≤60	116	155	FCCF3DL307#P155#5##2E3
	460	36	51	62	72	5520	2,8	2,7	≤60	116	230	FCCF3DL467#P230#5##2E3
	760	44	63	77	89	9120	2,5	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	24	34	42	48	1440	3,8	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	FCC3EDL636#L155#3##1E3
	100	32	46	56	65	1200	2,4	4,0	≤60	86	225	FCC3EDL107#L225#3##1E3
	100	28	40	50	57	1200	2,4	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	FCCL3DL866#P120#5##1E3
	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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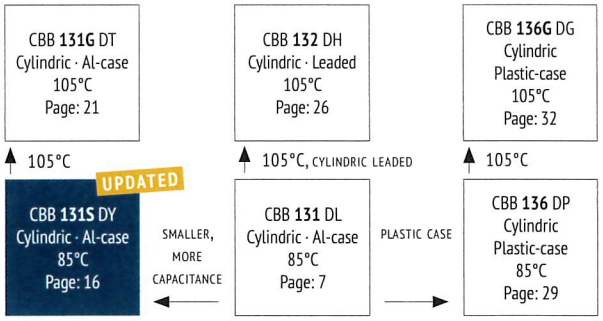
U_R ≤85°C (V_{DC})	C_R (µF)	I_{max} 70°C, 1kHz (A)	60°C, 1kHz (A)	50°C, 1kHz (A)	≤40°C, 1kHz (A)	$\hat{I}$ [1] (A)	ESR_{typ} 20°C, 1kHz (mΩ)	R_{th} [2] (K/W)	L_S 20°C (nH)	D ±1,0 (mm)	H ±1,0 (mm)	ORDER CODE "#" to be defined, see ordering code table
3000 3F	200	49	70	86	99	2400	1,4	2,9	≤80	136	230	FCC3FDL207#T230#5##2E3
	240	64	91	100	100	2880	1,1	2,2	≤80	116	345	FCC3FDL247#P345#5##3E3
	250	64	91	100	100	3000	1,2	2,0	≤80	136	252	FCC3FDL257#T252#5##2E3
	330	74	100	100	100	3960	1,0	1,8	≤80	136	345	FCC3FDL337#T345#5##3E3
3200 3U	64	27	38	47	54	768	2,7	5,0	≤60	116	120	FCC3UDL646#P120#5##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#5##2E3
	120	48	69	84	97	1440	1,7	2,5	≤80	136	175	FCC3UDL127#T175#5##2E3
	180	49	70	86	99	2160	1,4	2,9	≤80	136	230	FCC3UDL187#T230#5##2E3
	210	59	83	100	100	2520	1,3	2,2	≤80	116	345	FCC3UDL217#P345#5##3E3
	220	59	85	100	100	2640	1,4	2,0	≤80	136	252	FCC3UDL227#T252#5##2E3
	300	68	96	100	100	3600	1,2	1,8	≤80	136	345	FCC3UDL307#T345#5##3E3
3600 3V	44	29	42	51	59	528	2,3	5,0	≤60	116	120	FCC3VDL446#P120#5##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#5##2E3
	120	51	73	89	100	1440	1,3	2,9	≤80	136	230	FCC3VDL127#T230#5##2E3
	160	61	86	100	100	1920	1,2	2,2	≤80	116	345	FCC3VDL167#P345#5##3E3
	170	62	88	100	100	2040	1,3	2,0	≤80	136	252	FCC3VDL177#T252#5##2E3
	230	74	100	100	100	2760	1,0	1,8	≤80	136	345	FCC3VDL237#T345#5##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 ($\Theta_{hotspot}$ ≤ 85 °C)
Storage Temperature	–40 ~ +85 °C
Rated Voltage U_{RDC}	600 ~ 1.500V_{DC}
Capacitance Range	110 ~ 1.600 µF
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}	≥ 3.000V_{AC} (20°C, 50Hz, 10s)
Max. Overvoltage	Please see IEC 61071
Insulation Resistance R_i*C	≥ 10.000 MΩ * µF (20 °C, 100 V_{DC}, 1 min)
Dielectric Dissipation Factor tan δ$_0$	≤ 2 * 10^{-4} (20 °C, 100 Hz)
Life Time Expectancy	≥ 100.000h, failure rate ≤ 100 FIT ($\Theta_{hotspot}$ ≤ 70°C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACh compliant.

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

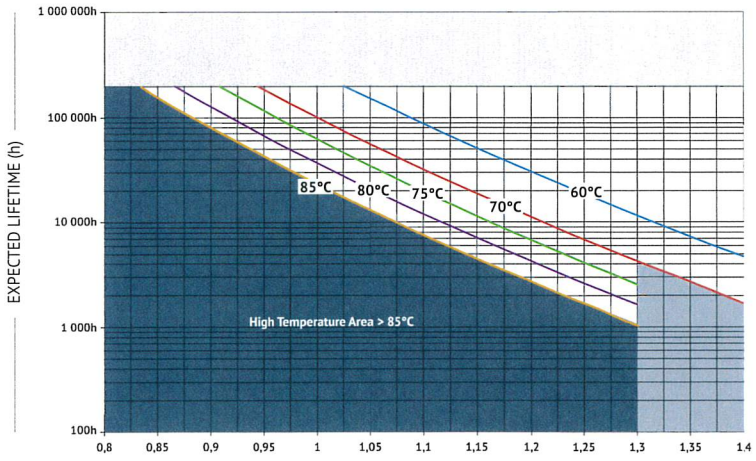
APPROVALS

UL94-V0:

Plastic & Compound Mass

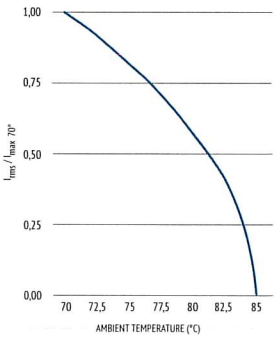
LIFETIME

END OF LIFE: 3% REDUCTION OF CAPACITANCE



WORKING/RATED VOLTAGE RATIO (U/U_R) FOR DIFFERENT HOTSPOT TEMPERATURES

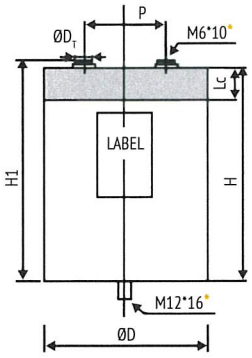
CURRENT DERATING

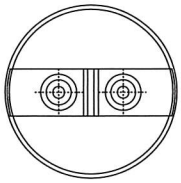


DC-LINK

CAN STYLES

CAN STYLE J/K





H1=H+5mm

Aluminum/Plastic Case
Anti-Creep Insulation

D_T = 12mm

M6*10 screw female*

*preferred

in mm

DIMENSIONS

Diameter D ± 1,0 mm	Can Style	Pitch P ± 0,5mm	Length Cab Lc ± 1,0 mm	Diameter Terminal D_T ± 0,5mm
76	J	32	10	12
86	J	32	10	12
86	K	32	32	12

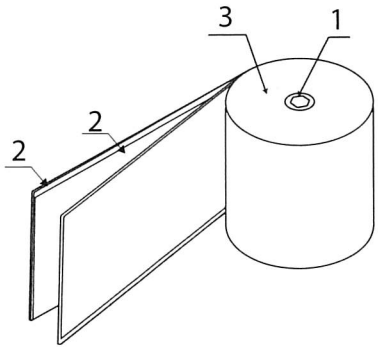
Max. Torque for terminals: 3 Nm (M5), 5 Nm (M6), 6 Nm (M8), 8 Nm (M10)
Max. Torque for stud mounting screws: 12 Nm (M12), 15Nm (M16)

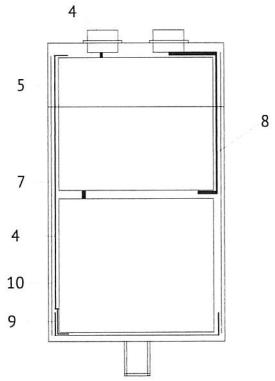
ORDER CODE

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**	CBB131S **DY**	100 **107**	±5% **J**	76 **H**	95 **095**	Female M5*7 **8**	32 **3**	flat, with Y bracket **Y**	Style J **J**	**1**	
		700 **2Q**		220 **227**	±10% **K**	86 **L**	120 **120**	Female M6*10 **0**		flat, without bracket **0**	Style K **K**	**2**	
		800 **2K**		420 **427**	±20% **M**		136 **136**	Female M8*10 **2**		bolt M12x16 **1**			
		900 **R2**		500 **507**			155 **155**	Female M8*12 **6**		bolt M16x25 **2**			
		1000 **3A**		1000 **108**			175 **175**	Female M10*10 **4**		bolt M12x12 **3**			
		1100 **A3**		1100 **118**				Female M10*12 **B**					
		1200 **3B**						Male M6*20 **1**					
		1500 **C3**						Male M8*12 **9**					
								Male M8*15 **A**					
								Male M8*17 **7**					
								Male M8*20 **3**					
								Male M10*20 **5**					

INTERNAL CONSTRUCTION

(Example: Can Style J, double inner construction)

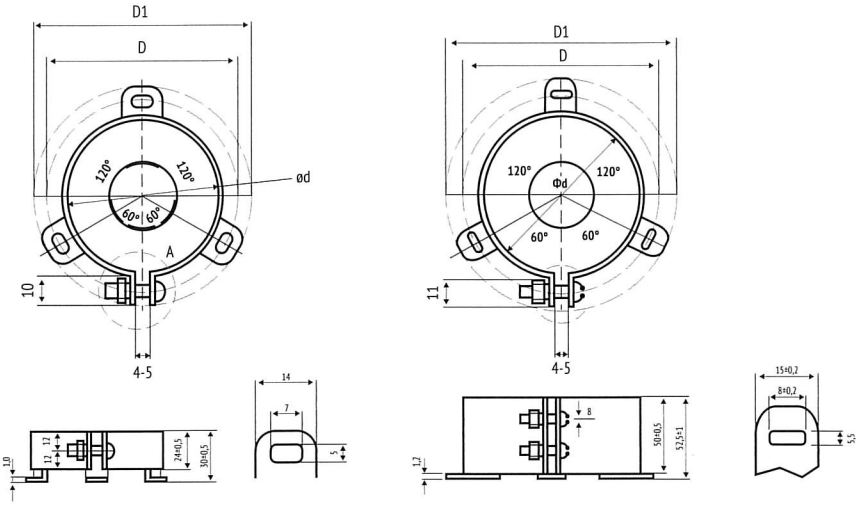




NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn
4	Terminals	Cu, Sn-plated
5	Deck	PC

NO.	ITEM	MATERIAL
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

Jianghai	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	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	R_{th} (2)	L_S	D	H H1=H+5mm	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°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	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
	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
	1600	48	68	70	70	4500	1,0	4,3	≤60	86	175	FCC2SDY168#L175#3##2E3
700 2Q	500	35	50	61	70	1680	1,6	5,1	≤50	76	95	FCC2QDY507#H095#3##2E3
	660	36	51	62	71	2200	1,4	5,6	≤50	86	95	FCC2QDY667#L095#3##2E3
	700	32	46	56	65	1680	2,0	4,7	≤60	76	120	FCC2QDY707#H120#3##2E3
	850	31	45	55	64	1680	2,3	4,3	≤60	76	155	FCC2QDY857#H155#3##2E3
	900	35	50	61	70	3350	1,7	4,8	≤60	86	120	FCC2QDY907#L120#3##2E3
	1000	44	63	70	70	3200	1,2	4,2	≤60	76	175	FCC2QDY108#H175#3##2E3
	1100	34	49	60	70	2260	1,8	4,6	≤60	86	136	FCC2QDY118#L136#3##2E3
	1200	35	50	62	70	2350	1,8	4,4	≤60	86	155	FCC2QDY128#L155#3##1E3
	1400	48	68	70	70	4500	1,0	4,3	≤50	86	175	FCC2QDY148#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	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
	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	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
	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
	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
	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
	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

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

>>

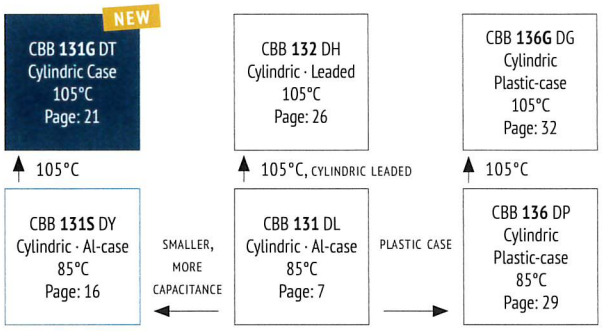
U_R	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	R_{th} (2)	L_S	D	H H1=H+5mm	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	50°C, 1kHz	≤40°C, 1kHz		20°C, 1kHz		20°C	±1,0	±1,0	"#" to be defined, see ordering code table
(V_{DC})	(µF)	(A)	(A)	(A)	(A)	(A)	(mΩ)	(K/W)	(nH)	(mm)	(mm)	
1200 3B	180	31	43	53	61	1520	2,1	5,1	≤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
	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	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)

FEATURES

- **DC-Link**
- 105°C
- 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 ~ +105 °C ($\Theta_{hotspot}$ ≤ 105 °C)
Storage Temperature	–40 ~ +85 °C
Rated Voltage U_R	600 ~ 1.600V_{DC}
Capacitance Range	130 ~ 1.000 µF
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}	≥ 3.000V_{AC} (20°C, 50Hz, 10s)
Max. Overvoltage	Please see IEC 61071
Insulation Resistance R_i*C	≥ 10.000 MΩ * µF (20 °C, 100 V_{DC}, 1 min)
Dielectric Dissipation Factor tan δ_0	≤ 2 * 10^{-4} (20 °C, 100 Hz)
Life Time Expectancy	≥ 100.000h, failure rate ≤ 100 FIT ($\Theta_{hotspot}$ ≤ 70°C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACh compliant.

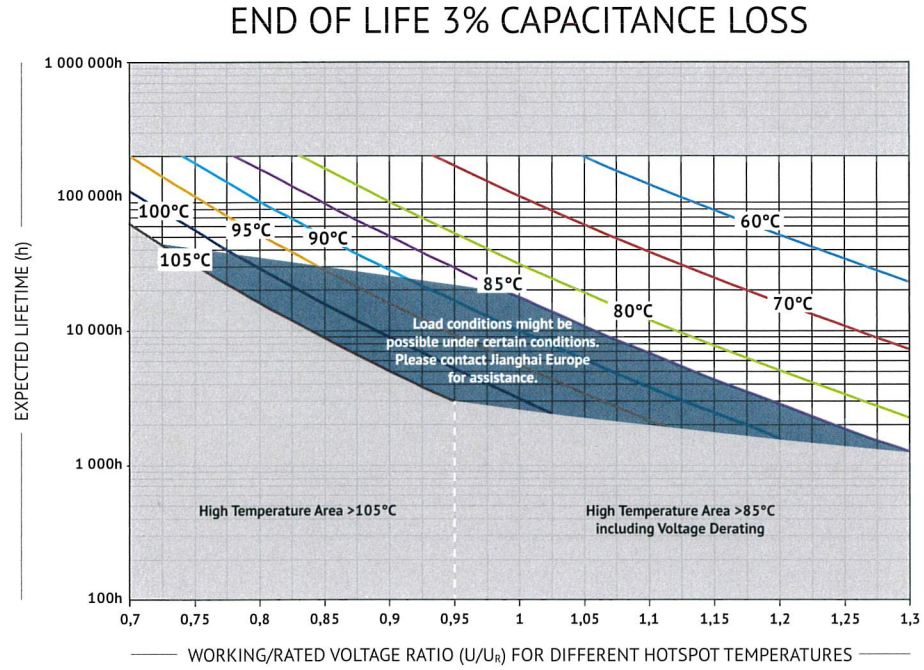
The detailed version please see seperate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

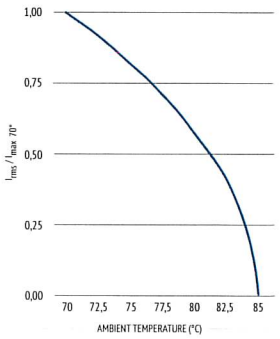
UL94-V0:

Plastic & Compound Mass

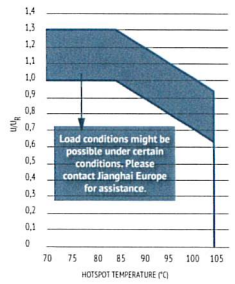
LIFETIME



CURRENT DERATING



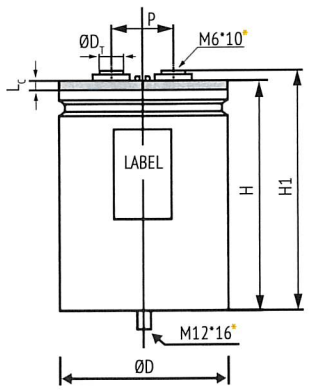
VOLTAGE DERATING

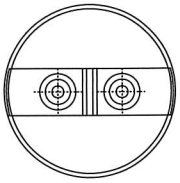


DC-LINK

CAN STYLES

CAN STYLE B UPDATED





H1=H+5mm

Aluminum Case
with Flanging
Anti-Creep Insulation

D_T = 12mm*

M6*10 screw female*

*preferred

in mm

DIMENSIONS

Diameter D	Can Style	Pitch P	Length Cab Lc	Diameter Terminal D_T
± 1,0 mm		± 0,5mm	± 1,0 mm	± 0,5mm
76	B	32	32	12
86	B	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)

Other Can Styles on request.

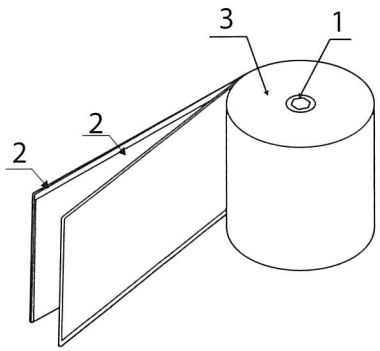
DC-LINK

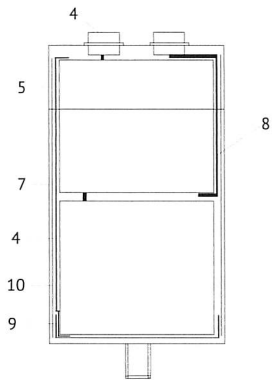
ORDER CODE

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**	CBB131G **DT**	100 **107**	±5% **J**	76 **H**	95 **095**	Female M5*7 **8**	32 **3**	flat, with Y bracket **Y**	Style B **B**	**1**	
		700 **2Q**		220 **227**	±10% **K**	86 **L**	120 **120**	Female M6*10 **0**		flat, without bracket **0**		**2**	
		800 **2K**		420 **427**	±20% **M**		136 **136**	Female M8*10 **2**		bolt M12x16 **1**			
		900 **R2**		500 **507**			155 **155**	Female M8*12 **6**		bolt M16x25 **2**			
		1000 **3A**		1000 **108**			175 **175**	Female M10*10 **4**		bolt M12x12 **3**			
		1100 **A3**		1100 **118**				Female M10*12 **B**					
		1200 **3B**						Male M6*20 **1**					
		1400 **O3**						Male M8*12 **9**					
		1600 **3C**						Male M8*15 **A**					
								Male M8*17 **7**					
								Male M8*20 **3**					
								Male M10*20 **5**					

INTERNAL CONSTRUCTION

(Example: Can Style J, double inner construction)

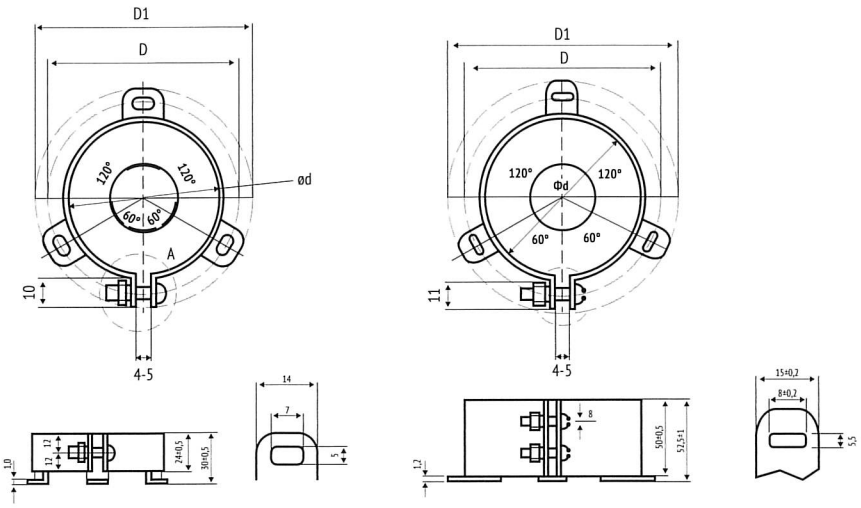




NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn
4	Terminals	Cu, Sn-plated
5	Deck	PC

NO.	ITEM	MATERIAL
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

Jianghai	BRAND
CBB 131G	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~+105°C IEC61071	TEMPERATURE RANGE, REFERENCE STANDARD
Discharge before handling	SAFETY WARNING
JE37F26104	DATE CODE

U_R	C_R	I_{max}			$\hat{I}$ (1)	ESR_{typ}	R_{th}(2)	L_S	D	H H1=H+5mm	ORDER CODE
≤85°C		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)	(mΩ)	(K/W)	(nH)	(mm)	(mm)	
600 2S	350	50	61	70	3600	1,6	5,1	≤60	76	95	FCC2SDT357#H095#3#BE3
	480	45	55	64	3840	2,1	4,7	≤60	76	120	FCC2SDT487#H120#3#BE3
	480	51	62	71	3840	1,4	5,6	≤60	86	95	FCC2SDT487#L095#3#BE3
	580	43	52	60	5800	2,4	4,6	≤60	76	136	FCC2SDT587#H136#3#BE3
	620	56	68	79	6200	1,5	4,3	≤60	76	155	FCC2SDT627#H155#3#BE3
	700	55	67	77	7200	1,6	4,2	≤60	76	175	FCC2SDT707#H175#3#BE3
	750	47	57	66	7200	2,0	4,6	≤60	86	136	FCC2SDT757#L136#3#BE3
	950	56	68	79	9500	1,5	4,3	≤60	86	175	FCC2SDT957#L175#3#BE3
700 2Q	280	48	59	68	2800	1,7	5,1	≤50	76	95	FCC2QDT287#H095#3#BE3
	370	49	60	69	3700	1,5	5,6	≤50	86	95	FCC2QDT377#L095#3#BE3
	380	44	54	62	3800	2,2	4,7	≤60	76	120	FCC2QDT387#H120#3#BE3
	430	41	50	58	4300	2,6	4,6	≤60	76	136	FCC2QDT437#H136#3#BE3
	470	54	66	76	4700	1,6	4,3	≤60	76	155	FCC2QDT477#H155#3#BE3
	510	48	59	68	5100	1,8	4,8	≤60	86	120	FCC2QDT517#L120#3#BE3
	560	53	65	75	5600	1,7	4,2	≤60	76	175	FCC2QDT567#H175#3#BE3
	580	47	57	65	5800	2,0	4,6	≤60	86	136	FCC2QDT587#L136#3#BE3
	640	55	67	77	6400	1,5	4,4	≤50	86	155	FCC2QDT647#L155#3#BE3
	750	54	66	76	7500	1,6	4,3	≤60	86	175	FCC2QDT757#L175#3#BE3
	1000	60	73	85	8000	1,4	4,0	≤60	86	225	FCC2QDT108#L225#3#BE3
800 2K	280	44	54	63	2800	2,0	5,1	≤50	76	95	FCC2KDT287#H095#3#BE3
	370	47	58	67	3700	1,6	5,6	≤50	86	95	FCC2KDT377#L095#3#BE3
	380	40	50	57	3800	2,6	4,7	≤60	76	120	FCC2KDT387#H120#3#BE3
	430	39	47	55	4300	2,9	4,6	≤60	76	136	FCC2KDT437#H136#3#BE3
	470	52	64	74	4700	1,7	4,3	≤60	76	155	FCC2KDT477#H155#3#BE3
	510	44	54	62	5100	2,1	4,8	≤60	86	120	FCC2KDT517#L120#3#BE3
	560	49	60	69	5600	2,0	4,2	≤60	76	175	FCC2KDT567#H175#3#BE3
	580	44	54	62	5800	2,2	4,6	≤60	86	136	FCC2KDT587#L136#3#BE3
	640	55	67	77	6400	1,5	4,4	≤50	86	155	FCC2KDT647#L155#3#BE3
	750	53	66	76	7500	1,6	4,3	≤60	86	175	FCC2KDT757#L175#3#BE3
	1000	58	71	82	8000	1,5	4,0	≤60	86	225	FCC2KDT108#L225#3#BE3
900 R2	220	40	50	57	2420	2,4	5,1	≤50	76	95	FCCR2DT227#H095#3#BE3
	290	44	54	62	3190	1,8	5,6	≤50	86	95	FCCR2DT297#L095#3#BE3
	300	38	46	54	3300	2,9	4,7	≤60	76	120	FCCR2DT307#H120#3#BE3
	330	36	44	51	3630	3,3	4,6	≤60	76	136	FCCR2DT337#H136#3#BE3
	360	49	60	69	3960	1,9	4,3	≤60	76	155	FCCR2DT367#H155#3#BE3
	400	42	52	60	4400	2,3	4,8	≤60	86	120	FCCR2DT407#L120#3#BE3
	420	49	60	69	4620	2,0	4,2	≤60	76	175	FCCR2DT427#H175#3#BE3
	450	46	56	64	4950	2,1	4,6	≤60	86	136	FCCR2DT457#L136#3#BE3
	500	53	65	75	5000	1,6	4,4	≤50	86	155	FCCR2DT507#L155#3#BE3
	560	52	64	73	5600	1,7	4,3	≤60	86	175	FCCR2DT567#L175#3#BE3
	810	65	79	91	8100	1,6	3,0	≤60	86	225	FCCR2DT817#L225#3#BE3
1000 3A	170	38	47	54	2040	2,7	5,1	≤50	76	95	FCC3ADT177#H095#3#BE3
	240	37	45	52	2880	3,1	4,7	≤60	76	120	FCC3ADT247#H120#3#BE3
	240	43	53	61	2880	1,9	5,6	≤50	86	95	FCC3ADT247#L095#3#BE3
	270	36	44	51	3240	3,4	4,6	≤60	76	136	FCC3ADT277#H136#3#BE3
	300	48	59	68	3600	2,0	4,3	≤60	76	155	FCC3ADT307#H155#3#BE3
	320	41	51	58	3840	2,4	4,8	≤60	86	120	FCC3ADT327#L120#3#BE3
	350	46	56	64	4200	2,3	4,2	≤60	76	175	FCC3ADT357#H175#3#BE3
	420	43	52	60	5040	2,4	4,6	≤60	86	136	FCC3ADT427#L136#3#BE3
	420	57	70	81	5040	1,4	4,4	≤50	86	155	FCC3ADT427#L155#3#BE3
	480	50	62	71	5760	1,8	4,3	≤60	86	175	FCC3ADT487#L175#3#BE3
	650	53	65	75	6500	1,8	4,0	≤60	86	225	FCC3ADT657#L225#3#BE3

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

>>

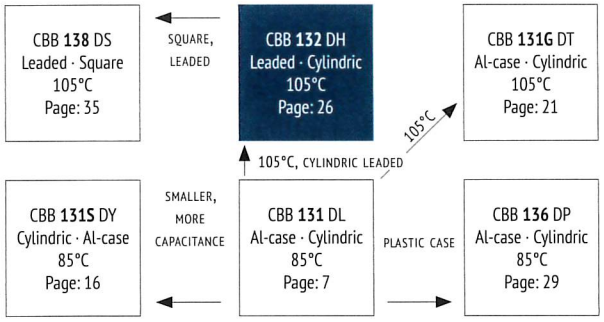
U_R	C_R	I_{max}			$\hat{I}$ (1)	ESR_{typ}	R_{th}(2)	L_S	D	H H1=H+5mm	ORDER CODE
≤85°C		70°C, 1kHz	60°C, 1kHz	≤50°C, 1kHz		20°C, 1kHz		20°C	±1,0	±1,0	"#" to be defined, see ordering code table
(V_{DC})	(µF)	(A)	(A)	(A)	(A)	(mΩ)	(K/W)	(nH)	(mm)	(mm)	
1100 A3	140	36	44	51	1680	3,0	5,1	≤50	76	95	FCCA3DT147#H095#3#BE3
	190	41	51	58	2280	2,1	5,6	≤50	86	95	FCCA3DT197#L095#3#BE3
	200	35	43	50	2400	3,4	4,7	≤50	76	120	FCCA3DT207#H120#3#BE3
	220	34	42	48	2640	3,7	4,6	≤60	76	136	FCCA3DT227#H136#3#BE3
	240	46	56	65	2880	2,2	4,3	≤60	76	155	FCCA3DT247#H155#3#BE3
	260	39	48	55	3120	2,7	4,8	≤60	86	120	FCCA3DT267#L120#3#BE3
	280	44	53	62	3360	2,5	4,2	≤60	76	175	FCCA3DT287#H175#3#BE3
	300	41	50	58	3600	2,6	4,6	≤60	86	136	FCCA3DT307#L136#3#BE3
	330	50	61	71	3960	1,8	4,4	≤50	86	155	FCCA3DT337#L155#3#BE3
	380	51	62	72	4560	1,8	4,3	≤60	86	175	FCCA3DT387#L175#3#BE3
	540	50	61	71	5940	2,0	4,0	≤60	86	225	FCCA3DT547#L225#3#BE3
1200 3B	120	34	42	49	1440	3,3	5,1	≤50	76	95	FCC3BDT127#H095#3#BE3
	160	34	42	48	1920	3,7	4,7	≤60	76	120	FCC3BDT167#H120#3#BE3
	160	39	48	56	1920	2,3	5,6	≤50	86	95	FCC3BDT167#L095#3#BE3
	180	33	40	46	2160	4,1	4,6	≤60	76	136	FCC3BDT187#H136#3#BE3
	210	44	54	62	2520	2,4	4,3	≤60	76	155	FCC3BDT217#H155#3#BE3
	220	40	49	57	2640	2,6	4,8	≤60	86	120	FCC3BDT227#L120#3#BE3
	240	41	51	58	2880	2,8	4,2	≤60	76	175	FCC3BDT247#H175#3#BE3
	250	39	47	55	3000	2,9	4,6	≤60	86	136	FCC3BDT257#L136#3#BE3
	280	52	63	73	3360	1,7	4,4	≤50	86	155	FCC3BDT287#L155#3#BE3
	320	49	61	70	3840	1,9	4,3	≤60	86	175	FCC3BDT327#L175#3#BE3
	450	48	58	67	5400	2,2	4,0	≤60	86	225	FCC3BDT457#L225#3#BE3
1400 03	170	35	43	50	2040	3,3	4,8	≤60	86	120	FCCO3DT177#L120#3#BE3
	210	48	58	67	2520	2,0	4,4	≤60	86	155	FCCO3DT217#L155#3#BE3
	330	45	55	63	3960	2,5	4,0	≤60	86	225	FCCO3DT337#L225#3#BE3
1600 3C	130	35	42	49	1560	3,5	4,8	≤60	86	120	FCC3CDT137#L120#3#BE3
	160	44	54	63	1920	2,3	4,4	≤60	86	155	FCC3CDT167#L155#3#BE3
	250	42	51	59	3000	2,9	4,0	≤60	86	225	FCC3CDT257#L225#3#BE3

(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
- 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 ($\Theta_{hotspot}$ ≤ 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}	≥ 3.000 V_{AC} (20°C, 50 Hz, 10s)
Max. Overvoltage	Please see IEC 61071
Insulation Resistance R_i*C	≥ 5.000 MΩ * µF (20°C, 100 V_{DC}, 1 min)
Dielectric Dissipation Factor tan δ_0	≤ 2 * 10^{-4} (20°C, 100 Hz)
Life Time Expectancy	≥ 100.000h, failure rate ≤ 50 FIT ($\Theta_{hotspot}$ ≤ 70°C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACh compliant.

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

APPROVALS

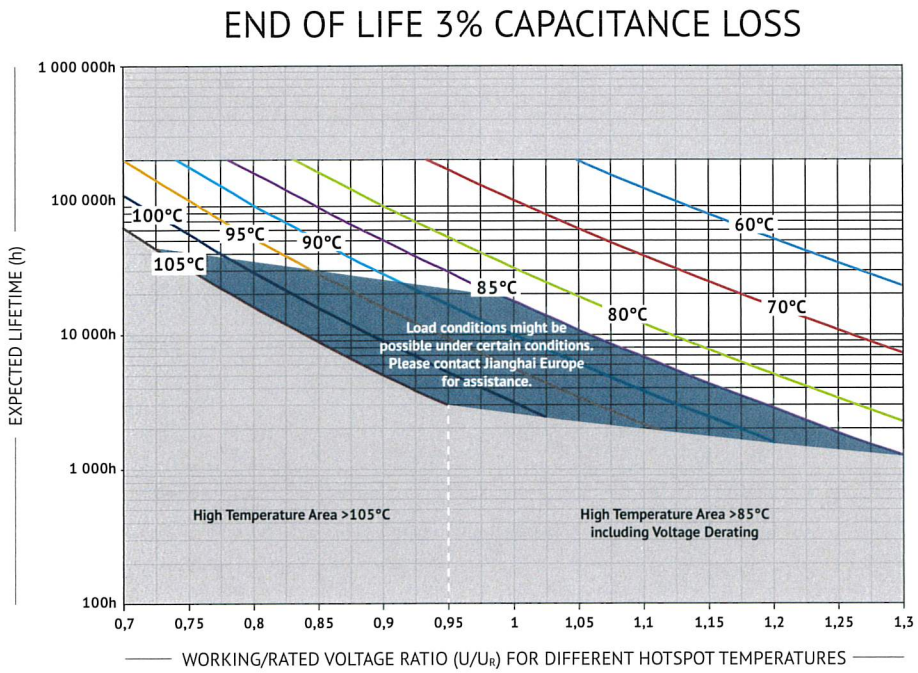
UL94-V0:

Plastic & Compound Mass

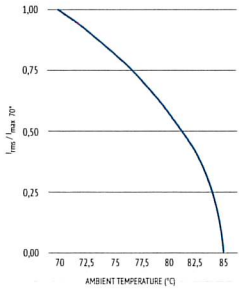
UL810:

CZDS2.E227010
(Construction)

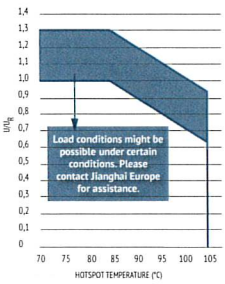
LIFETIME



CURRENT DERATING

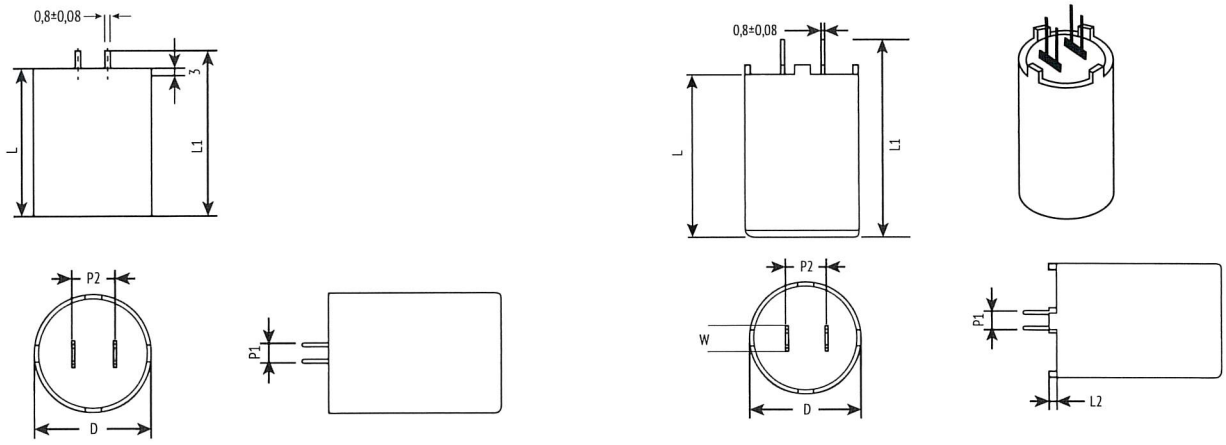


VOLTAGE DERATING



DC-LINK

DIMENSIONS



STYLE A

NO SOCKET,
4 SOLDERING PINS

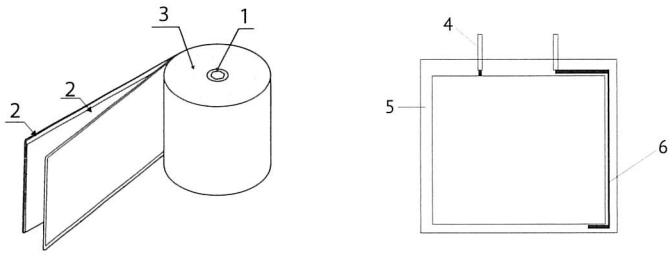
STYLE B

WITH SOCKET,
4 SOLDERING PINS

W TYPICALLY 8MM+/-1MM
L2 TYPICALLY 1,5MM+/-1MM

in mm

INTERNAL CONSTRUCTION



NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn

NO.	ITEM	MATERIAL
4	Terminals	Cu, Sn-plated
5	Potting Compound	Epoxy
6	Connection Electrode Case	Cu

MARKING

Jianghai — BRAND

CBB 132 — PRODUCT SERIES

60µF J 800V — CAPACITANCE, TOLERANCE AND RATED VOLTAGE

J02F12 — DATE CODE

DC-LINK

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**	CBB 132 = **DH**	50	**506**	±5%	**J**	50	**D**	59,0	**059**	12,7	**W**	M8*10	**4**	A	**A**	
		800	**2K**		75	**756**	±10%	**K**	56,3	**C**	61,3	**061**			without	**0**	B	**B**	
		1000	**3A**		80	**806**			63,5	**E**	70,6	**071**							
		1200	**3B**		110	**117**			35,9	**X**									
					120	**127**													
					145	**157**													
					200	**207**													
					220	**227**													

RATINGS

U_R	C_R	I_{max}				$\hat{I}$ [1]	ESR_{typ}	R_{th} [2]	dV/dt	D	L	L_1	P_1	P_2	ORDER CODE
≤85°C		70°C 10kHz	60°C 10kHz	50°C 10kHz	≤40°C 10kHz		20°C, 1kHz		20°C	±0,5	±0,8	±1,3	±0,5	±0,5	"#" to be defined, see ordering code table
(V_{DC})	(µF)	(A)	(A)	(A)	(A)	(A)	(mΩ)	(K/W)	(V/µs)	(mm)	(mm)	(mm)	(mm)	(mm)	
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

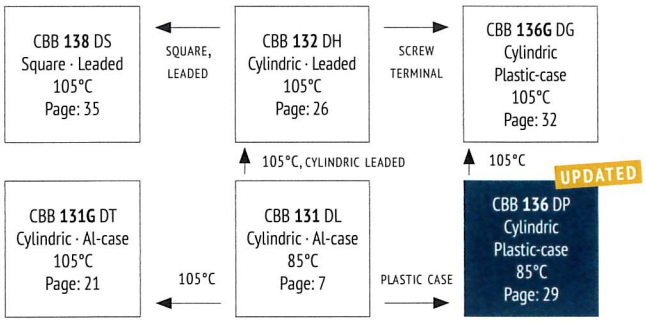
(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

DC-LINK

FEATURES

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

OVERVIEW



PRODUCT

DC-LINK

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 ($\Theta_{hotspot}$ ≤ 85 °C)
Storage Temperature	–40 ~ +85 °C
Rated Voltage U_{RDC}	600 ~ 1.300 V_{DC}
Capacitance Range	60 ~ 645 µF
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}	≥ 3.000 V_{AC} (20°C, 50 Hz, 10 s)
Max. Overvoltage	Please see IEC 61071
Insulation Resistance R_i*C	≥ 5.000 MΩ * µF (20°C, 100 V_{DC}, 1 min)
Dielectric Dissipation Factor tan δ_0	≤ 2 * 10^{-4} (20°C, 100 Hz)
Life Time Expectancy	≥ 100.000 h, failure rate ≤ 50 FIT ($\Theta_{hotspot}$ ≤ 70°C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACh compliant.

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

APPROVALS

UL94-V0:

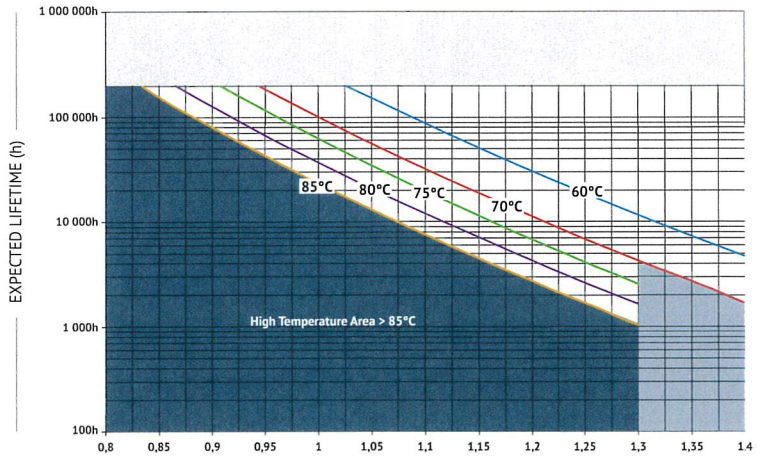
Plastic & Compound Mass

UL810:

CZDS2.E227010
(Construction)

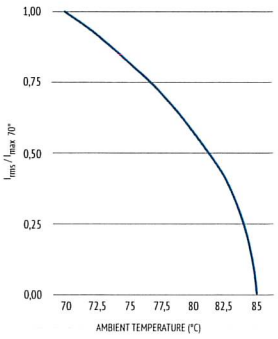
LIFETIME

END OF LIFE: 3% REDUCTION OF CAPACITANCE



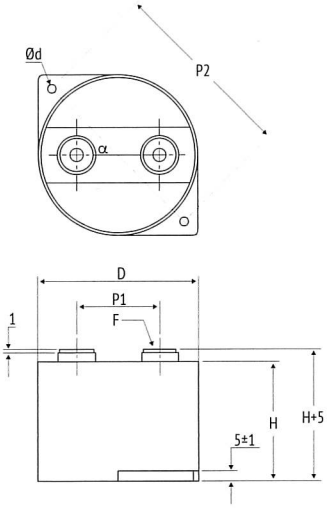
— WORKING/RATED VOLTAGE RATIO (U/U_R) FOR DIFFERENT HOTSPOT TEMPERATURES —

CURRENT DERATING

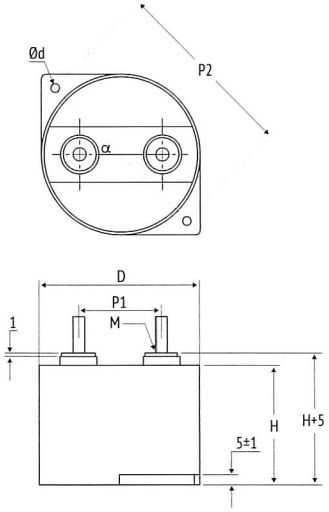


DIMENSIONS

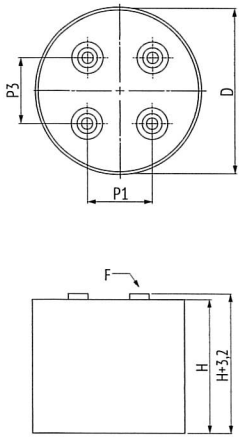
STYLE A



STYLE B



STYLE C



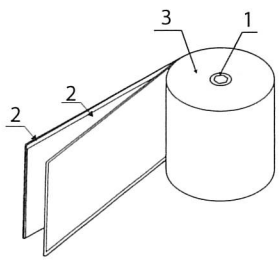
in mm

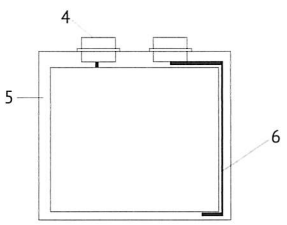
ΦD±1 (mm)	H±1 (mm)	P1 ± 0.5 (mm)	P2 ± 0.5 (mm)	P3 ± 0.5 (mm)	Terminal (mm) F Female	Terminal (mm) M Male	Φd ± 0.5 (mm)
84,5/85	51	45	101	-	**M6*10** [order code 0]	**M8*20** [order code 3]	5,5
84,5/85	65	45	101	-	**M6*10** [order code 0]	**M8*20** [order code 3]	5,5
95	83	38	-	38	**M6*10** [order code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





NO.	ITEM	MATERIAL
1	Winding Core	PC
2	Metallized Film	PP + Al, Zn
3	Metal Sprayed Electrode	Zn + Sn/Zn

NO.	ITEM	MATERIAL
4	Terminals	Cu, Sn-plated
5	Potting Compound	Epoxy
6	Connection Electrode Case	Cu

MARKING

Jianghai	BRAND
CBB 136	SERIES DESIGNATION
200µF ±10%	CAPACITANCE AND TOLERANCE
U_R = 600VDC	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
E304F12$_{104}$	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**	CBB 136 = **DP**	50	**506**	±5%	**J**	84,5	**J**	51	**051**	Female M6*10	**0**	45	**4**	with	**0**	Style A	**A**	
		800	**2K**		75	**756**	±10%	**K**	85	**K**	65	**065**	Male M8*20	**3**	38	**3**	without	**1**	Style B	**B**	
		1000	**3A**		80	**806**			95	**W**	83	**083**							Style C	**C**	
		1100	**A3**		110	**117**															
		1200	**3B**		120	**127**															
		1300	**03**		200	**207**															
					220	**227**															
					280	**287**															

RATINGS

U_R ≤85°C (V_{DC})	C_R (µF)	I_{max} 70°C, 1kHz (A)	60°C, 1kHz (A)	≤50°C, 1kHz (A)	$\hat{I}$ (1) (A)	ESR_{typ} 20°C, 1kHz (mΩ)	R_{th} (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	48	62	74	2100	1,2	5,3	≤30	85	51	FCC2SDP207#K051#40#1E3
	260	56	72	85	2193	0,9	5,3	≤32	84,5	51	FCC2SDP267#J051#40#1E3
	280	46	60	71	2100	1,4	5,0	≤40	84,5	65	FCC2SDP287#J065#40#1E3
		46	60	71	2100	1,4	5,0	≤40	85	65	FCC2SDP287#K065#40#1E3
	380	55	71	84	2135	1,0	5,0	≤40	84,5	65	FCC2SDP387#J065#40#1E3
	645	47	68	83	4000	0,84	5,2	≤25	95	83	FCC2SDP657#W083#31C1E3
800 2K	120	49	63	74	2100	1,2	5,3	≤32	85	51	FCC2KDP127#K051#40#1E3
	150	53	69	81	2174	1,0	5,3	≤32	84,5	51	FCC2KDP157#K051#40#1E3
	220	52	67	80	2100	1,1	5,0	≤40	84,5	65	FCC2KDP227#J065#40#1E3
		52	67	80	2100	1,1	5,0	≤40	85	65	FCC2KDP227#K065#40#1E3
1000 3A	75	45	58	69	1900	1,4	5,3	≤32	85	51	FCC3ADP756#K051#40#1E3
	100	47	60	71	1900	1,3	5,3	≤32	84,5	65	FCC3ADP107#J065#40#1E3
	110	42	54	64	1800	1,7	5,0	≤40	85	65	FCC3ADP117#K065#40#1E3
	140	45	58	68	1800	1,5	5,0	≤40	84,5	65	FCC3ADP147#J065#40#1E3
1100 A3	100	46	60	71	1936	1,3	5,3	≤32	84,5	51	FCCA3DP107#J051#40#1E3
	140	44	58	68	1805	1,5	5,0	≤40	84,5	65	FCCA3DP147#J065#40#1E3
1200 3B	60	38	49	57	1800	2,0	5,3	≤32	85	51	FCC3BDP606#K051#40#1E3
	70	45	58	69	1800	1,4	5,3	≤32	84,5	51	FCC3BDP706#J051#40#1E3
	90	37	48	56	1700	2,2	5,0	≤40	85	65	FCC3BDP906#K065#40#1E3
	100	41	53	62	1700	1,8	5,0	≤40	84,5	65	FCC3BDP107#J065#40#1E3
1300 03	70	45	58	68	1800	1,4	5,3	≤32	84,5	51	FCC03DP706#J051#40#1E3
	100	40	52	62	1700	1,8	5,0	≤40	84,5	65	FCC03DP107#J065#40#1E3

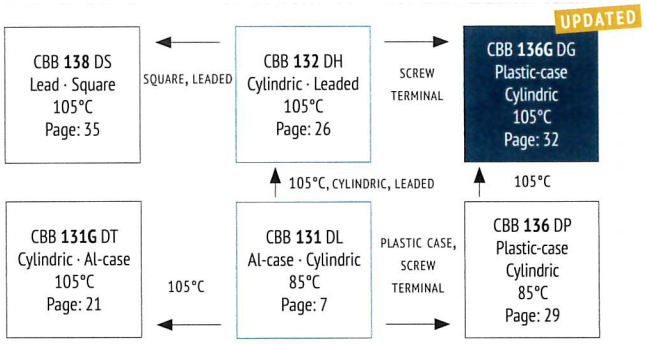
(1) Maximum permissible peak current, (2) Thermal resistance from hotspot to ambient (free convection)

DC-LINK

FEATURES

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

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 ($\Theta_{hotspot}$ ≤ 105 °C) $\Theta_{hotspot}$ = 85~105°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	±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)
Max. Overvoltage	Please see IEC 61071
Insulation Resistance R_i*C	≥ 5.000 MΩ * µF (20°C, 100 V_{DC}, 1 min)
Dielectric Dissipation Factor tan δ_o	≤ 2 * 10^{-4} (20°C, 100 Hz)
Life Time Expectancy	≥ 100.000 h, failure rate ≤ 50 FIT ($\Theta_{hotspot}$ ≤ 70°C, U_{RDC})
Reference Standard	IEC 61071:2007

ENVIRONMENTAL

The products are RoHS, WEEE and REACh compliant.

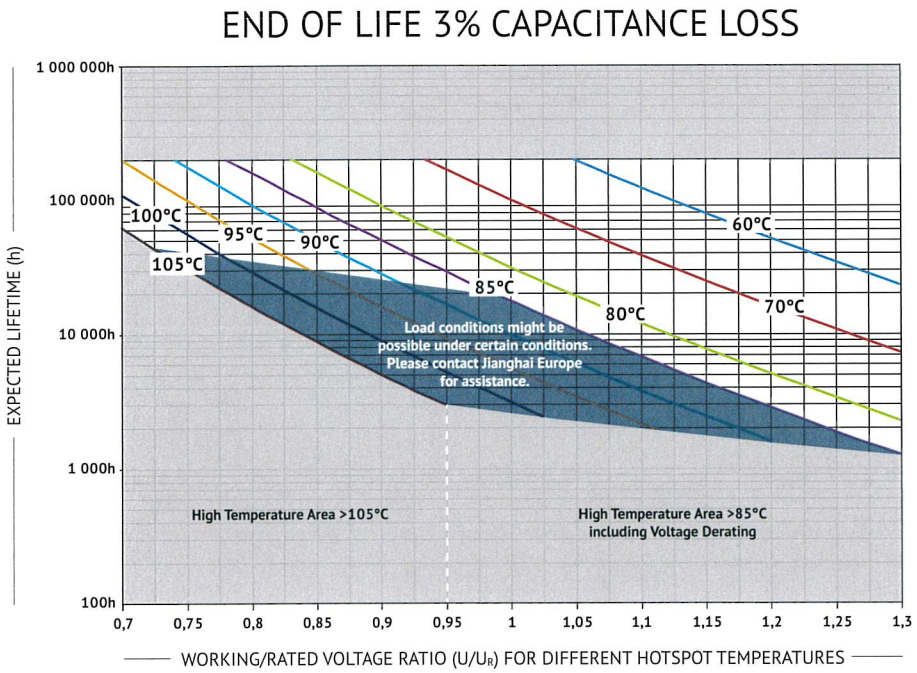
The detailed version please see seperate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

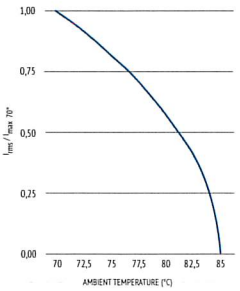
UL94-V0:

Plastic & Compound Mass

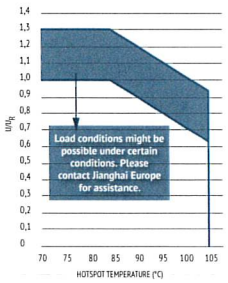
LIFETIME



CURRENT DERATING



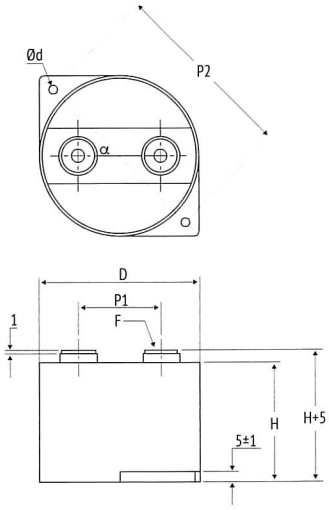
VOLTAGE DERATING



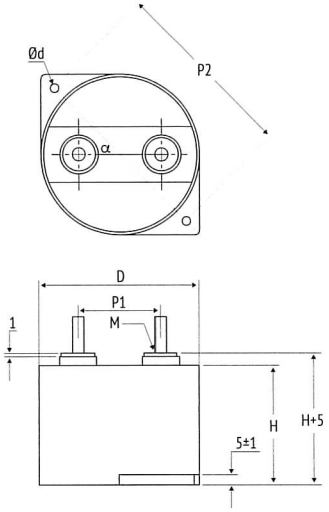
DC-LINK

DIMENSIONS

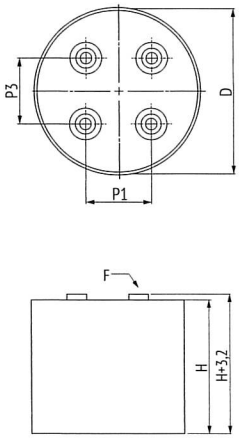
STYLE A



STYLE B



STYLE C



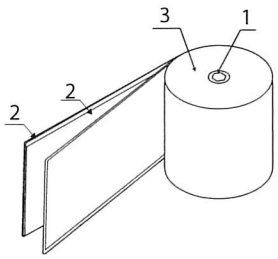
in mm

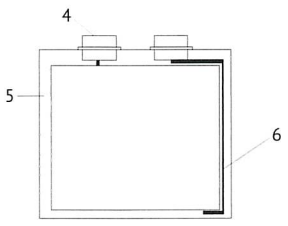
ΦD±1 (mm)	H±1 (mm)	P1 ± 0.5 (mm)	P2 ± 0.5 (mm)	P3 ± 0.5 (mm)	Terminal (mm)		Φd ± 0.5 (mm)
					F Female	M Male	
84,5/85	51	45	101	-	**M6*10** [order code 0]	**M8*20** [order code 3]	5,5
84,5/85	65	45	101	-	**M6*10** [order code 0]	**M8*20** [order code 3]	5,5
95	83	38	-	38	**M6*10** [order code 0]	-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

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





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

MARKING

Jianghai	BRAND
CBB 136G	SERIES DESIGNATION
200µF ±10%	CAPACITANCE AND TOLERANCE
U_R = 600VDC	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
E05F13104	DATE CODE

DC-LINK

ORDER CODE

FC	C	3A		DG	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**	CBB 136G = **DG**	50	**506**	±5%	**J**	84,5	**J**	51	**051**	Female M6*10	**0**	45	**4**	with	**0**	Style A	**A**	
		800	**2K**		75	**756**	±10%	**K**	85	**K**	65	**065**	Male M8*20	**3**	38	**3**	without	**1**	Style B	**B**	
		900	**R2**		80	**806**			95	**W**									Style C	**C**	
		1000	**3A**		110	**117**															
					120	**127**															
					200	**207**															
					220	**227**															
					280	**287**															

RATINGS

U_R	C_R	I_{max}				$\hat{I}$ (1)	ESR_{typ}	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	58	75	85	90	2000	1,1	5,3	≤32	85	51	FCC2SDG147#K051#4##1E3
	150	59	79	89	97	2240	1,0	5,3	≤32	84,5	51	FCC2SDG157#J051#4##1E3
	220	59	78	87	90	2100	1,1	5,0	≤40	84,5	65	FCC2SDG227#J065#4##1E3
800 2K	90	53	69	78	85	2000	1,3	5,3	≤32	85	51	FCC2KDG906#K051#4##1E3
	100	58	75	85	90	1998	1,1	5,3	≤32	84,5	51	FCC2KDG107#J051#4##1E3
	140	54	71	80	88	1800	1,3	5,0	≤40	84,5	65	FCC2KDG147#J065#4##1E3
900 R2	70	55	72	81	89	1688	1,2	5,3	≤32	84,5	51	FCCR2DG706#J051#4##1E3
	100	54	71	80	88	1570	1,3	5,0	≤40	84,5	65	FCCR2DG107#J065#4##1E3
1000 3A	55	49	64	72	79	1500	1,5	5,3	≤32	85	51	FCC3ADG556#K051#4##1E3
	85	48	62	70	76	1400	1,7	5,0	≤40	84,5	65	FCC3ADG856#J065#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

CBB **132** DH
Cylindric · Leaded
105°C
Page: 26

→ SQUARE →

CBB **138** DS
Lead · Square
105°C
Page: 35

↑ SOLDERING PINS, 105°C

CBB **131** DL
Cylindric · Al-case
85 °C
Page: 7

→ 105°C →

CBB **131G** DT
Cylindric · Al-case
105°C
Page: 21

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 ($\Theta_{hotspot}$ ≤ 105 °C) $\Theta_{hotspot}$ = 85~105°C: See Voltage Derating Diagram
Storage Temperature	–40 ~ +105 °C
Rated Voltage U_{RDC}	450 ~ 1.500 V_{DC}
Capacitance Range	1 ~ 170 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)
Dielectric Dissipation Factor tan δ_0	≤ 2 * 10^{-4} (20 °C, 1 kHz)
Insulator Resistance R_i*C	≥ 10.000 MΩ * µF (20 °C, 100 V_{DC}, 1 min)
Max. Overvoltage	Please see IEC 61071
Life Time Expectancy	≥ 100.000h, 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 seperate "Environmental Certificates" document or www.jianghai-europe.com

APPROVALS

UL94-V0:

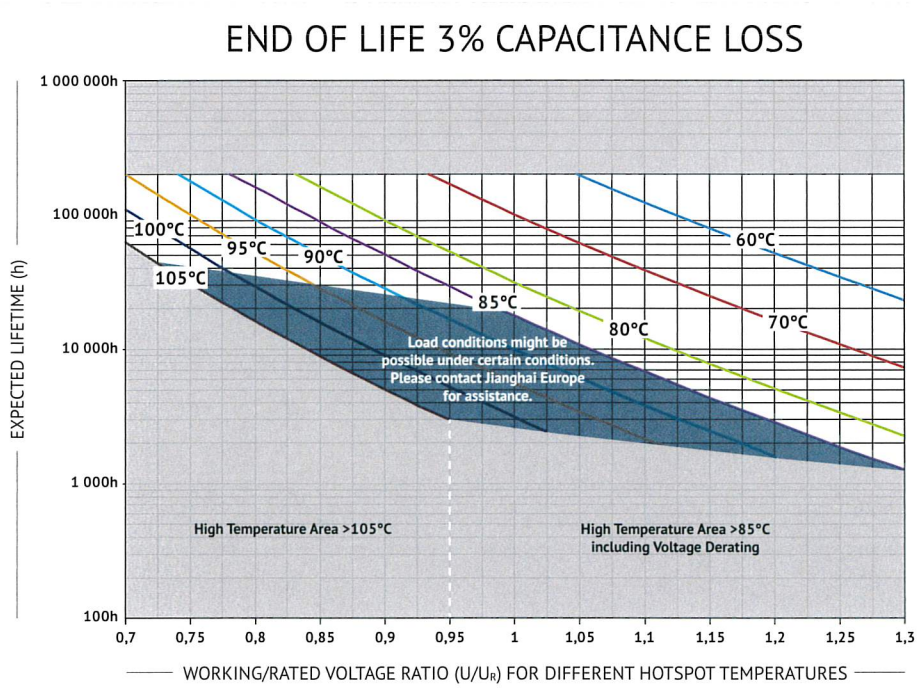
Plastic & Compound Mass

UL810:

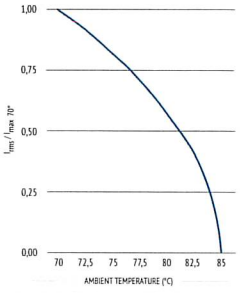
CZDS2.E227010
(Construction)

DC-LINK

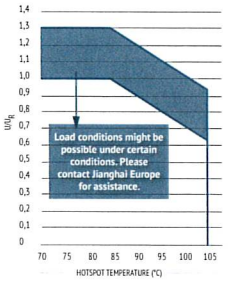
LIFETIME



CURRENT DERATING

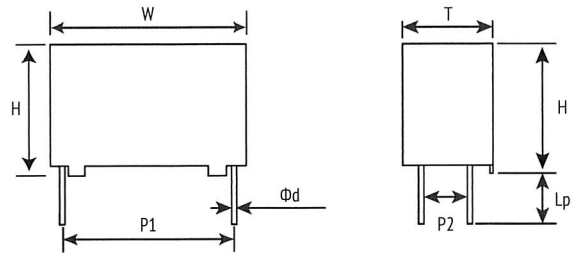


VOLTAGE DERATING

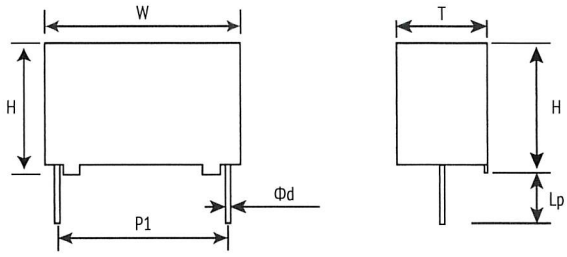


DIMENSIONS

4 PIN TYPE

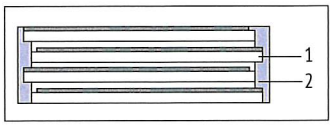


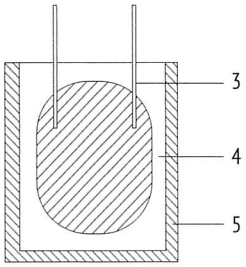
2 PIN TYPE



Lp = 5,0 ±1mm · other styles on request

INTERNAL CONSTRUCTION





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

MARKING

BRAND

CBB 138

PRODUCT SERIES

50µF J 800V

CAPACITANCE, TOLERANCE AND RATETD VOLTAGE

G02F12

DATE CODE

HUMIDITY IMPROVEMENT

Capacitors in THB design are available on request.

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**	CBB 138 = **DS**	0,68 **684**	±5% **J**	4 Pin Lp = 8mm **K**	32 x 18 x 9 **I1**	22,5 **22**	20,3 **20**	0,6 **A**	
		500 **2H**		0,82 **824**	±10% **K**	4 Pin Lp = 5mm **A**	32 x 20 x 11 **I4**	27,5 **27**	10,2 **10**	0,8 **B**	
		550 **2Y**		1,0 **105**		4 Pin Lp = 4,5mm **L**	32 x 22 x 13 **I7**	37,5 **37**	- **00**	1,0 **C**	
		600 **2S**		1,2 **125**		4 Pin Lp = 4mm **S**	32 x 28 x 14 **IC**	52,5 **52**		1,2 **D**	
		700 **2Q**		2,0 **205**		4 Pin Lp = 3,5mm **J**	32 x 28 x 18 **ID**			0,5 **E**	
		800 **2K**		5,0 **505**		2 Pin long leads (~ 20mm) **C**	32 x 33 x 18 **IF**				
		900 **R2**		10 **106**		2 Pin Lp = 5mm **B**	32 x 37 x 22 **II**				
		1000 **3A**		20 **206**		2 Pin Lp = 4,5mm **T**	32 x 24,5 x 15 **IJ**				
		1100 **A3**				2 Pin Lp = 4,0mm **M**	42,5 x 37 x 28 **F1**				
		1200 **3B**				2 Pin Lp = 3,5mm **U**	42,5 x 40 x 20 **F2**				
		1300 **03**				2 Pin Lp = 3,2mm **V**	42,5 x 32 x 19 **F5**				
		1500 **C3**					42,5 x 44 x 24 **F9**				
							42,5 x 45 x 30 **FF**				
							42 x 42 x 28 **FH**				
							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**				

RATINGS

U_R ≤85°C (VDC)	C_R (µF)	I_{max} 70°C 10kHz (A)	I_{max} 60°C 10kHz (A)	I_{max} ≤50°C 10kHz (A)	$\hat{I}$ (1) (A)	ESR_{typ} 20°C 10kHz (mΩ)	R_{th} (2) (K/W)	dV/dt 20°C (V/µS)	W +1/-1,5 (mm)	H +1/-1,5 (mm)	T +1/-1,5 (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	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	53	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)

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U_R ≤85°C (VDC)	C_R (µF)	I_{max} 70°C 10kHz (A)	I_{max} 60°C 10kHz (A)	I_{max} ≤50°C 10kHz (A)	$\hat{I}$ (1) (A)	ESR_{typ} 20°C 10kHz (mΩ)	R_{th} (2) (K/W)	dV/dt 20°C (V/µS)	W +1/-1,5 (mm)	H +1/-1,5 (mm)	T +1/-1,5 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	Ød ±0,05 (mm)	ORDER CODE "#" to be defined, see ordering code table
600 2S	40	18,0	25,4	31,2	1200	4,0	7,7	30	42,5	45	30	37,5	20,3	1,2	FCS2SDS406##FF3720DE3
	50	14,0	19,8	24,3	750	6,5	7,8	15	57,5	50	35	52,5	20,3	1,2	FCS2SDS506##HL5220DE3
	60	16,0	22,6	27,7	900	5,0	7,8	15	57,5	50	35	52,5	20,3	1,2	FCS2SDS606##HL5220DE3
	70	18,0	25,4	31,1	1050	5,0	6,2	15	57,5	50	35	52,5	20,3	1,2	FCS2SDS706##HL5220DE3
	80	20,0	28,1	34,5	1200	4,0	6,3	15	57,5	55	45	52,5	20,3	1,2	FCS2SDS806##HS5220DE3
	90	24,0	34,0	36,0	1350	4,0	4,3	15	57,5	55	45	52,5	20,3	1,2	FCS2SDS906##HS5220DE3
	100	26,0	36,0	36,0	1500	4,0	3,7	15	57,5	53	50	52,5	20,3	1,2	FCS2SDS107##HA5220DE3
	110	28,0	36,0	36,0	1650	3,5	3,6	15	57,5	53	50	52,5	20,3	1,2	FCS2SDS117##HA5220DE3
	120	30,0	36,0	36,0	1800	3,4	3,3	15	57,5	60	35	52,5	20,3	1,2	FCS2SDS127##H65220DE3
	130	32,0	36,0	36,0	1950	3,3	3	15	57,5	65	35	52,5	20,3	1,2	FCS2SDS137##KA5220DE3
	140	34,0	36,0	36,0	2100	3,2	2,7	15	57,5	70	35	52,5	20,3	1,2	FCS2SDS147##H85220DE3
	140	34,0	36,0	36,0	2100	3,2	2,7	15	57,5	65	45	52,5	20,3	1,2	FCS2SDS147##H75220DE3
	150	36,0	36,0	36,0	2250	3,0	2,6	15	57,5	80	35	52,5	20,3	1,2	FCS2SDS157##K45220DE3
700 2Q	1	2,5	3,5	4,3	75	54,0	29,6	75	32	18	9	27,5	\	0,8	FCS2QDS105##I12700BE3
	2	3,0	4,2	5,1	150	35,0	31,7	75	32	18	9	27,5	\	0,8	FCS2QDS205##I12700BE3
	3	4,5	6,3	7,8	150	28,0	17,6	50	32	20	11	27,5	\	0,8	FCS2QDS305##I42700BE3
	3,3	5,5	7,7	9,5	165	26,0	12,7	50	32	28	14	27,5	\	0,8	FCS2QDS335##IC2700BE3
	5	6,0	8,4	10,4	250	14,0	19,8	50	32	28	14	27,5	\	0,8	FCS2QDS505##IC2700BE3
	6	6,0	8,4	10,4	450	14,0	19,8	75	32	28	18	27,5	\	0,8	FCS2QDS605##ID2700BE3
	8	9,0	12,0	12,0	400	10,0	12,3	50	32	33	18	27,5	\	0,8	FCS2QDS805##IF2700BE3
	10	10,0	12,0	12,0	500	7,0	14,3	50	32	33	18	27,5	\	0,8	FCS2QDS106##IF2700BE3
	10	12,0	12,0	12,0	500	6,5	10,7	50	32	37	22	27,5	\	0,8	FCS2QDS106##II2700BE3
	10	11,5	15,0	15,0	300	7,5	10,1	30	42,5	18	24	37,5	\	1	FCS2QDS106##FL3700CE3
	12	12,0	12,0	12,0	600	6,0	10,7	50	32	37	22	27,5	\	0,8	FCS2QDS126##II2700BE3
	12	12,0	15,0	15,0	360	7,0	9,9	30	42,5	18	24	37,5	\	1	FCS2QDS126##FL3700CE3
	15	9,0	12,7	15,0	450	9,0	13,7	30	42,5	33,5	22	37,5	\	1	FCS2QDS156##FT3700CE3
	15	10,0	14,1	17,3	450	8,0	12,5	30	42,5	33,5	22	37,5	10,2	1	FCS2QDS156##FT3710CE3
	15	10,0	14,1	17,3	450	8,0	12,5	30	42,5	40	20	37,5	10,2	1	FCS2QDS156##F23710CE3
	20	12,0	16,9	20,7	600	7,5	9,3	30	42,5	37	28	37,5	10,2	1	FCS2QDS206##F13710CE3
	22	14,0	19,8	24,3	660	6,5	7,8	30	42,5	44	24	37,5	10,2	1	FCS2QDS226##F93710CE3
	25	16,0	22,6	27,7	750	6,0	6,5	30	42,5	44	24	37,5	10,2	1	FCS2QDS256##F93710CE3
	30	16,0	22,6	27,7	900	5,8	6,7	30	42,5	45	30	37,5	20,3	1,2	FCS2QDS306##FF3720DE3
	35	20,0	28,4	34,8	1050	5,5	4,5	30	42,5	50	35	37,5	20,3	1,2	FCS2QDS356##FK3720DE3
	40	14,0	19,8	24,2	600	5,0	10,2	15	57,5	45	30	52,5	20,3	1,2	FCS2QDS406##HH5220DE3
	45	15,5	21,9	26,8	675	5,0	8,3	15	57,5	45	30	52,5	20,3	1,2	FCS2QDS456##HH5220DE3
	50	15,0	21,1	25,9	750	4,8	9,3	15	57,5	50	35	52,5	20,3	1,2	FCS2QDS506##HL5220DE3
	55	16,0	22,6	27,6	825	4,5	8,7	15	57,5	50	35	52,5	20,3	1,2	FCS2QDS556##HL5220DE3
	60	18,0	25,4	31,2	900	4,0	7,7	15	57,5	50	35	52,5	20,3	1,2	FCS2QDS606##HL5220DE3
	65	20,0	28,1	34,5	975	4,0	6,3	15	57,5	55	45	52,5	20,3	1,2	FCS2QDS656##HS5220DE3
	70	20,0	28,2	34,5	1050	3,8	6,6	15	57,5	55	45	52,5	20,3	1,2	FCS2QDS706##HS5220DE3
	75	20,0	28,2	34,5	1125	3,8	6,6	15	57,5	55	45	52,5	20,3	1,2	FCS2QDS756##HS5220DE3
	80	22,0	31,1	36,0	1200	3,5	5,9	15	57,5	53	50	52,5	20,3	1,2	FCS2QDS806##HA5220DE3
	80	23,0	32,4	36,0	1200	3,4	5,6	15	57,5	60	35	52,5	20,3	1,2	FCS2QDS806##H65220DE3
	90	24,0	33,8	36,0	1350	3,5	5	15	57,5	53	50	52,5	20,3	1,2	FCS2QDS906##HA5220DE3
	90	24,0	33,8	36,0	1350	3,5	5	15	57,5	60	35	52,5	20,3	1,2	FCS2QDS906##H65220DE3
	100	26,0	36,0	36,0	1500	3,5	4,2	15	57,5	53	50	52,5	20,3	1,2	FCS2QDS107##HA5220DE3
	100	26,0	36,0	36,0	1500	3,5	4,2	15	57,5	65	35	52,5	20,3	1,2	FCS2QDS107##KA5220DE3
	110	28,0	36,0	36,0	1650	3,4	3,8	15	57,5	70	35	52,5	20,3	1,2	FCS2QDS117##H85220DE3
	120	30,0	36,0	36,0	1800	3,0	3,7	15	57,5	80	35	52,5	20,3	1,2	FCS2QDS127##K45220DE3
	130	32,0	36,0	36,0	1950	2,8	3,5	15	57,5	65	45	52,5	20,3	1,2	FCS2QDS137##H75220DE3
800 2K	1	2,0	2,8	3,4	75	62,0	40,3	75	32	18	9	27,5	\	0,8	FCS2KDS105##I12700BE3
	2	3,5	4,9	6,0	150	31,0	26,3	75	32	20	11	27,5	\	0,8	FCS2KDS205##I42700BE3
	3	4,5	6,3	7,7	225	21,0	23,5	75	32	22	13	27,5	\	0,8	FCS2KDS305##I72700BE3
	3,3	4,0	5,6	6,9	165	25,0	25	50	32	28	14	27,5	\	0,8	FCS2KDS335##IC2700BE3
	5	6,0	8,4	10,4	250	12,0	23,1	50	32	28	14	27,5	\	0,8	FCS2KDS505##IC2700BE3
	6	7,5	10,6	12,0	450	10,5	16,9	75	32	28	18	27,5	\	0,8	FCS2KDS605##ID2700BE3
	8	9,5	12,0	12,0	176	9,5	11,7	22	32	33	18	27,5	\	0,8	FCS2KDS805##IF2700BE3
	9	10,0	12,0	12,0	198	8,5	11,8	22	32	33	18	27,5	\	0,8	FCS2KDS905##IF2700BE3
	10	11,5	12,0	12,0	220	9,5	8	22	32	37	22	27,5	\	0,8	FCS2KDS106##II2700BE3
	10	8,0	11,3	13,8	300	12,5	12,5	30	42,5	32	19	37,5	\	1	FCS2KDS106##F53700CE3
	15	10,0	14,1	17,3	450	8,0	12,5	30	42,5	40	20	37,5	10,2	1	FCS2KDS156##F23710CE3
	20	12,0	16,9	20,8	600	7,0	9,9	30	42,5	37	28	37,5	10,2	1	FCS2KDS206##F13710CE3
	20	13,5	19,1	23,4	600	6,5	8,4	30	42,5	44	24	37,5	10,2	1	FCS2KDS206##F93710CE3
	22	14,0	19,8	24,2	660	6,0	8,5	30	42,5	44	24	37,5	10,2	1	FCS2KDS226##F93710CE3
	25	14,0	19,7	24,2	425	5,5	9,3	17	42,5	45	30	37,5	20,3	1,2	FCS2KDS256##FF3720DE3
	30	16,0	22,6	27,6	900	4,5	8,7	30	42,5	45	30	37,5	20,3	1,2	FCS2KDS306##FF3720DE3
	35	14,2	20,1	24,6	420	6,5	7,6	12	57,5	45	30	52,5	20,3	1,2	FCS2KDS356##HH5220DE3

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

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U_R ≤85°C (VDC)	C_R (µF)	I_{max} 70°C 10kHz (A)	I_{max} 60°C 10kHz (A)	I_{max} ≤50°C 10kHz (A)	$\hat{I}$ (1) (A)	ESR_{typ} 20°C 10kHz (mΩ)	R_{th} (2) (K/W)	dV/dt 20°C (V/µS)	W +1/-1,5 (mm)	H +1/-1,5 (mm)	T +1/-1,5 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	Ød ±0,05 (mm)	ORDER CODE "#" to be defined, see ordering code table
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##IJ2700BE3
	5	7,0	9,9	12,0	300	12,5	16,3	60	32	28	18	27,5	\	0,8	FCSR2DS505##ID2700BE3
	6	8,0	11,3	12,0	360	11,0	14,2	60	32	33	18	27,5	\	0,8	FCSR2DS605##IF2700BE3
	8	10,5	12,0	12,0	480	10,0	9,1	60	32	37	22	27,5	\	0,8	FCSR2DS805##II2700BE3
	10	12,0	12,0	12,0	600	10,0	6,9	60	32	37	22	27,5	\	0,8	FCSR2DS106##II2700BE3
	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##IJ2700BE3
	5	8,0	11,2	12,0	300	14,0	11,2	60	32	33	18	27,5	\	0,8	FCS3ADS505##IF2700BE3
	8	10,0	12,0	12,0	480	12,0	8,3	60	32	37	22	27,5	\	0,8	FCS3ADS805##II2700BE3
	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)

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DC-LINK

U_R ≤85°C (VDC)	C_R (µF)	I_{max} 70°C 10kHz (A)	I_{max} 60°C 10kHz (A)	I_{max} ≤50°C 10kHz (A)	$\hat{I}$ (1) (A)	ESR_{typ} 20°C 10kHz (mΩ)	R_{th}(2) (K/W)	dV/dt 20°C (V/µS)	W +1/-1,5 (mm)	H +1/-1,5 (mm)	T +1/-1,5 (mm)	P_1 ±0,5 (mm)	P_2 ±0,5 (mm)	Ød ±0,05 (mm)	ORDER CODE "#" to be defined, see ordering code table
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##I42700BE3
	1,5	3,5	4,9	6,0	105	30,0	27,2	70	32	22	13	27,5	\	0,8	FCSA3DS155##I72700BE3
	2	4,0	5,6	6,9	140	25,0	25	70	32	24,5	15	27,5	\	0,8	FCSA3DS205##IJ2700BE3
	2,2	5,0	7,0	8,6	154	16,5	24,2	70	32	28	14	27,5	\	0,8	FCSA3DS225##IC2700BE3
	3,3	6,5	9,1	11,2	231	11,5	20,6	70	32	28	18	27,5	\	0,8	FCSA3DS335##ID2700BE3
	4	8,0	11,3	12,0	280	10,5	14,9	70	32	33	18	27,5	\	0,8	FCSA3DS405##IF2700BE3
	5	8,5	12,0	12,0	350	9,5	14,6	70	32	37	22	27,5	\	0,8	FCSA3DS505##II2700BE3
	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##I42700BE3
	2	5,0	7,0	8,6	160	32,5	12,3	80	32	24,5	15	27,5	\	0,8	FCS3BDS205##IJ2700BE3
	2,2	5,5	7,7	9,5	176	17,0	19,4	80	32	28	18	27,5	\	0,8	FCS3BDS225##ID2700BE3
	3	7,0	9,8	12,0	240	16,0	12,8	80	32	28	18	27,5	\	0,8	FCS3BDS305##ID2700BE3
	3,3	8,0	11,3	12,0	264	13,5	11,6	80	32	33	18	27,5	\	0,8	FCS3BDS335##IF2700BE3
	5	10,0	12,0	12,0	400	12,0	8,3	80	32	37	22	27,5	\	0,8	FCS3BDS505##II2700BE3
	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
1500 C3	6,5	12,0	17,0	20,8	293	10,5	6,6	45	42	42	28	37,5	10,3	1,0	FCSC3DS655##FH3710CE3
	11	20,0	28,4	34,8	71	6,5	3,8	30	42	50	35	37,5	20,3	1,2	FCSC3DS116##FK3720DE3

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

DC-LINK