MC3D/DC-Link Metallized Plastic Film Capacitor DC Series (Box-Type) DC-Link Datasheet



Features:

■The range of capacitance values:2uF~180uF

■Temperature: -40℃～105℃（+85℃to+105℃decreasing factor1.25%per℃ for VRDC）

■Polypropylene and plastic case sealing

■Self-healing

■High insulation resistance

Application:

■High-performance DC filtering applications.

■Frequency converters、Industrial and high-end power supplies、Solar inverters.

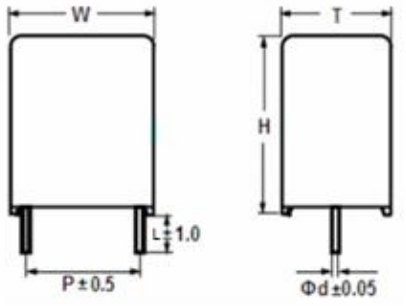
Part numbering on request.

Technical Requirement:

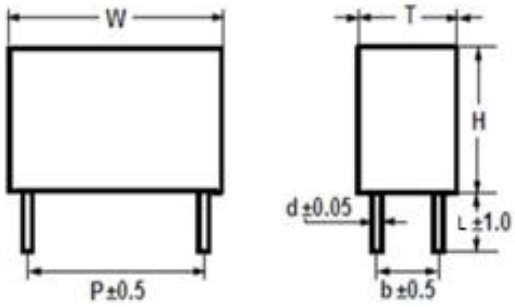
Climatic category	40/85/56
Rated voltage	500VDC、600VDC、800VDC、900VDC、1000VDC、1200VDC.
Dissipation Factor(tanδ)	≤0.2%(1KHz、1.0Vrms、20℃)
Withstand Voltage	$1.5U_R$(10s)
Insulation resistance	IR≥10000MΩ (AT 100VDC、60SEC、20℃)

Dimension:

Straight type（2 pins）



Straight type（4 pins）



Note: the lead length (L) shall be cut according to the customer's requirements， accuracy:5mm≤L≤9mm will be ±0.5mm、10mm≤L≤20mmwill be ±1.0mm.

Capacitance (uF)	Voltage	Dimensions (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
2	500VDC	31	20	11	27.5	0.8
	600VDC	31	22	13	27.5	0.8
	800VDC	31	22	13	27.5	0.8
	900VDC	31	25	14	27.5	0.8
	1000VDC	31	25	14	27.5	0.8
	1200VDC	41.5	28	14	37.5	1.0
3	500VDC	31	22	13	27.5	0.8
	600VDC	31	22	13	27.5	0.8
	800VDC	31	25	14	27.5	0.8
	900VDC	41.5	28	14	37.5	1.0
	1000VDC	41.5	28	14	37.5	1.0
	1200VDC	41.5	28	14	37.5	1.0
4	500VDC	31	25	15	27.5	0.8
	600VDC	31	25	15	27.5	0.8
	800VDC	31	25	15	27.5	0.8
	900VDC	41.5	28	14	37.5	1.0
	1000VDC	41.5	28	14	37.5	1.0
	1200VDC	41.5	30	17	37.5	1.0
5	500VDC	31	30	16	27.5	0.8
	600VDC	31	30	16	27.5	0.8
	800VDC	31	33	18	27.5	0.8
	900VDC	41.5	30	17	37.5	1.0
	1000VDC	41.5	30	17	37.5	1.0
	1200VDC	41.5	30	17	37.5	1.0

Capacitance (uF)	Voltage	Dimensions (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
6	500VDC	32	37	22	27.5	0.8
	600VDC	32	37	22	27.5	0.8
	800VDC	32	37	22	27.5	0.8
	900VDC	41.5	30	17	37.5	1.0
	1000VDC	41.5	30	17	37.5	1.0
	1200VDC	41.5	30	17	37.5	1.0
7	500VDC	32	37	22	27.5	0.8
	600VDC	32	37	22	27.5	0.8
	800VDC	32	37	22	27.5	0.8
	900VDC	41.5	30	17	37.5	1.0
	1000VDC	41.5	30	17	37.5	1.0
	1200VDC	41.5	30	17	37.5	1.0
8	500VDC	32	37	22	27.5	0.8
	600VDC	32	37	22	27.5	0.8
	800VDC	32	37	22	27.5	0.8
	900VDC	41.5	34	20.5	37.5	1.0
	1000VDC	41.5	34	20.5	37.5	1.0
	1200VDC	41.5	34	20.5	37.5	1.0
9	500VDC	32	37	22	27.5	0.8
	600VDC	32	37	22	27.5	0.8
	800VDC	41.5	34	20.5	37.5	1.0
	900VDC	41.5	34	20.5	37.5	1.0
	1000VDC	41.5	34	20.5	37.5	1.0
	1200VDC	41.5	34	20.5	37.5	1.0
10	500VDC	32	37	22	27.5	0.8
	600VDC	32	37	22	27.5	0.8
	800VDC	41.5	37	22	37.5	1.0
	900VDC	41.5	37	22	37.5	1.0
	1000VDC	41.5	45	30	37.5	1.0
	1200VDC	41.5	45	30	37.5	1.0

Capacitance (uF)	Voltage	Dimensions (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
11	500VDC	32	37	22	27.5	0.8
	600VDC	41.5	37	22	37.5	1.0
	800VDC	41.5	37	22	37.5	1.0
	900VDC	41.5	37	22	37.5	1.0
	1000VDC	41.5	45	30	37.5	1.0
	1200VDC	41.5	45	30	37.5	1.0
12	500VDC	41.5	45	30	37.5	1.0
	600VDC	41.5	45	30	37.5	1.0
	800VDC	41.5	45	30	37.5	1.0
	900VDC	41.5	45	30	37.5	1.0
	1000VDC	58	43.5	29.5	52.5	1.0
	1200VDC	58	43.5	29.5	52.5	1.0
15	500VDC	41.5	45	30	37.5	1.0
	600VDC	41.5	45	30	37.5	1.0
	800VDC	41.5	55	40	37.5	1.0
	900VDC	41.5	55	40	37.5	1.0
	1000VDC	58	45	30	52.5	1.0
	1200VDC	58	45	30	52.5	1.0
18	500VDC	41.5	55	40	37.5	1.0
	600VDC	41.5	55	40	37.5	1.0
	800VDC	41.5	55	40	37.5	1.0
	900VDC	41.5	55	40	37.5	1.0
	1000VDC	58	45	30	52.5	1.2
	1200VDC	58	45	30	52.5	1.2
20	500VDC	41.5	55	40	37.5	1.0
	600VDC	41.5	55	40	37.5	1.0
	800VDC	41.5	55	40	37.5	1.0
	900VDC	41.5	55	40	37.5	1.0
	1000VDC	58	45	30	52.5	1.2
	1200VDC	58	45	30	52.5	1.2
22	500VDC	32	37	22	27.5	1.0
	600VDC	41.5	55	40	37.5	1.0
	800VDC	41.5	55	40	37.5	1.0
	900VDC	41.5	55	40	37.5	1.0
	1000VDC	58	50	35	52.5	1.2
	1200VDC	58	50	35	52.5	1.2

Capacitance (uF)	Voltage	Dimensions (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
25	500VDC	41.5	55	40	37.5	1.0
	600VDC	41.5	55	40	37.5	1.0
	800VDC	58	43.5	29.5	52.5	1.0
	900VDC	58	43.5	29.5	52.5	1.0
	1000VDC	58	50	35	52.5	1.2
	1200VDC	58	50	35	52.5	1.2
30	500VDC	41.5	55	40	37.5	1.0
	600VDC	41.5	55	40	37.5	1.0
	800VDC	58	50	35	52.5	1.0
	900VDC	58	55	45	52.5	1.0
	1000VDC	58	55	45	52.5	1.2
35	500VDC	41.5	40	20	37.5	1.0
	600VDC	58	50	35	52.5	1.0
	800VDC	58	55	45	52.5	1.0
	900VDC	58	55	45	52.5	1.0
	1000VDC	58	55	45	52.5	1.2
40	500VDC	58	50	35	52.5	1.0
	600VDC	58	50	35	52.5	1.0
	800VDC	58	50	35	52.5	1.0
	900VDC	58	55	45	52.5	1.0
	1000VDC	58	55	45	52.5	1.2
45	500VDC	41.5	45	25	37.5	1.2
	600VDC	58	55	45	52.5	1.2
	800VDC	58	55	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
	1000VDC	58	65	45	52.5	1.2
50	500VDC	58	50	35	52.5	1.2
	600VDC	58	50	35	52.5	1.2
	800VDC	58	55	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
	1000VDC	58	65	45	52.5	1.2

Capacitance (uF)	Voltage	Dimensions (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
55	500VDC	41.5	45	30	37.5	1.2
	600VDC	58	50	35	52.5	1.2
	800VDC	58	65	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
	1000VDC	58	65	45	52.5	1.2
60	500VDC	58	50	35	52.5	1.2
	600VDC	58	50	35	52.5	1.2
	800VDC	58	55	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
	1000VDC	58	65	45	52.5	1.2
65	500VDC	58	50	35	52.5	1.2
	600VDC	58	50	35	52.5	1.2
	800VDC	58	55	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
	1000VDC	58	65	45	52.5	1.2
70	500VDC	41.5	50	35	37.5	1.2
	600VDC	58	55	45	52.5	1.2
	800VDC	58	55	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
	1000VDC	58	65	45	52.5	1.2
75	500VDC	58	55	45	52.5	1.2
	600VDC	58	55	45	52.5	1.2
	800VDC	58	65	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
80	500VDC	58	45	30	52.5	1.2
	500VDC	58	55	45	52.5	1.2
	600VDC	58	55	45	52.5	1.2
	800VDC	58	65	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2

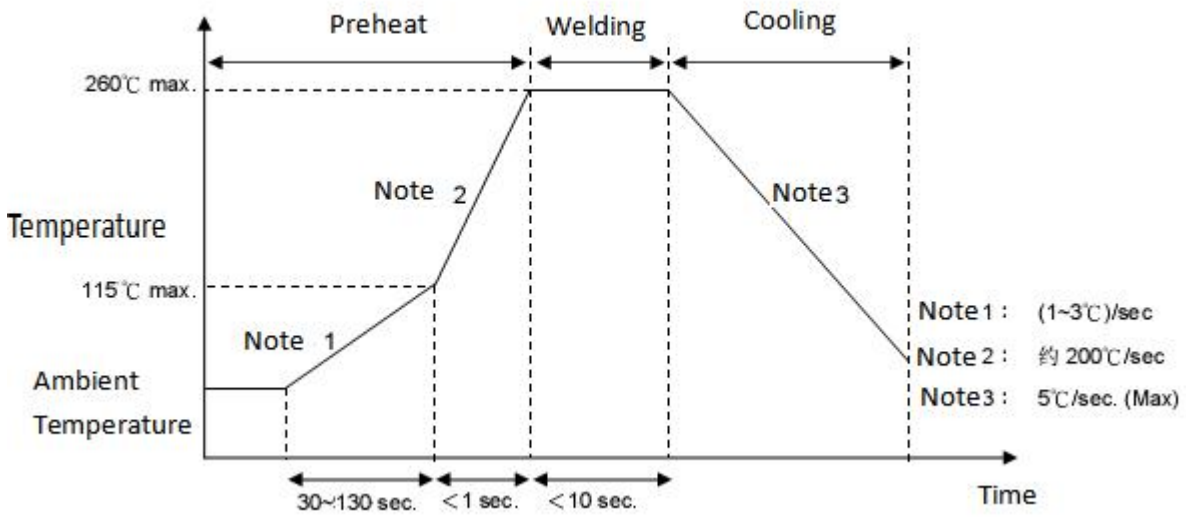
Capacitance (uF)	Voltage	Dimension (mm)				
		W±0.5	H±0.5	T±0.5	P±1.0	d±0.05
85	500VDC	58	65	45	52.5	1.2
	600VDC	58	65	45	52.5	1.2
	800VDC	58	65	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
90	500VDC	58	55	45	52.5	1.2
	600VDC	58	65	45	52.5	1.2
	800VDC	58	65	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
95	500VDC	58	55	45	52.5	1.2
	600VDC	58	55	45	52.5	1.2
	800VDC	58	65	45	52.5	1.2
	900VDC	58	65	45	52.5	1.2
100	500VDC	58	65	45	52.5	1.2
	600VDC	58	65	45	52.5	1.2
110	500VDC	58	50	35	52.5	1.2
	500VDC	58	55	45	52.5	1.2
	600VDC	58	65	45	52.5	1.2
120	500VDC	58	65	45	52.5	1.2
180	500VDC	58	65	45	52.5	1.2

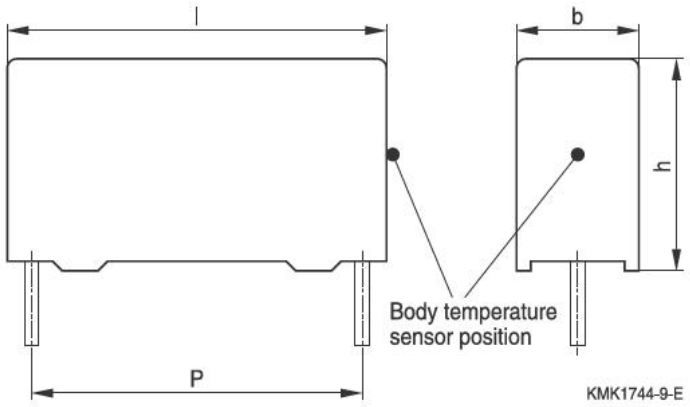
Marking：

Example	Meaning		
MC3D. 106K800V	1		Registered trademark
	2	MC3D	Series DC Link
	3	106	Electrostatic capacity
	4	K	Electrostatic capacity tolerance
	5	800V	Rated voltage

Soldering Conditions：

Wave Soldering Graph





PP:
During pre-heating: Tp ≤110℃
During soldering: Ts ≤120℃, ts ≤15 s
PE:
During pre-heating: Tp ≤125℃
During soldering: Ts ≤160℃, ts ≤15 s

Note: Film capacitor is not suitable for reflow soldering, because it will cause thermal contraction and affect electrical performance.

Iron Soldering Condition

Item	Condition
Temperature of soldering copper bit	350℃（max.）
Soldering duration	3sec（max.）
Space between soldering position and coating layer	2mm（min.）

Storage Conditions

- When store under the atmosphere, the terminal may contact with the substance of hydrochloride, hydrosulfide, sulfuric acid, etc. in the atmosphere, which needs to be paid attention to the deterioration of the solderability of the terminal.
- Product could not be exposed to high humidity and high temperature environment. Please store under below condition with the original packing.

A. Temperature: ≤35℃

B. Himidity: ≤70%RH

C. Storage period: Max 12 months