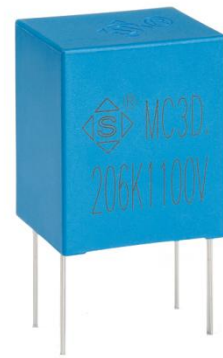


# MC3D/DC-Link Metallized Plastic Film Capacitor DC Series (Box-Type) DC-Link Datasheet



## Features:

- The range of capacitance values: 2 $\mu$ F~180 $\mu$ F
- Temperature: -40 $^{\circ}$ C ~ 105 $^{\circ}$ C (+85 $^{\circ}$ C to +105 $^{\circ}$ C decreasing factor 1.25% per  $^{\circ}$ C 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 Number Code:

3D	2K	106	J	L	M	B0	420	450	220	E	V	T
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**Series**  
3D:MC3D  
(DC-Link)

**Capacitance**  
105:1.0uF  
106:10uF  
107:100uF

**Pitch**  
V: 27.5mm  
L: 37.5mm  
I: 52.5mm

**Width**  
420:42.0mm

**Thickness**  
220:22.0mm

**Inner Management**

**Height**  
450:45.0mm

**Voltage**  
1X: 900VDC  
2K: 800VDC  
2H: 500VDC  
2J: 630VDC

**Terminal Type**  
E: Single-pin  
F: Double-terminal  
K: Upright screw  
M: 4-pin

**Environmental Standard**  
E: RoHS  
F: RoHS+HF

**Tolerance**  
J: ±5%  
K: ±10%

**Lead Length**  
30~39:3.0~3.9mm  
40~49:4.0~4.9mm  
50~59:5.0~5.9mm  
60~69:6.0~6.9mm  
70~79:7.0~7.9mm  
80~89:8.0~8.9mm  
90~99:9.0~9.9mm

**Lead Length**  
A0~A9:11.0~19.0mm  
B0~B9:20.0~29.0mm  
C0~C9:30.0~39.0mm

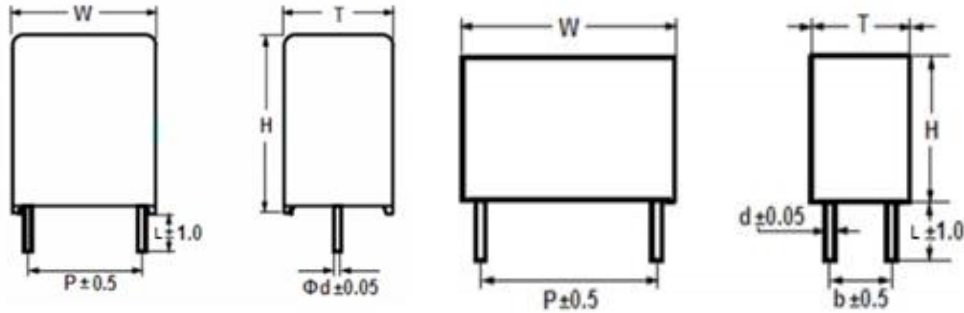
### Technical Requirement:

<b>Climatic category</b>	40/85/56
<b>Rated voltage</b>	500VDC、600VDC、800VDC、900VDC、1000VDC、1200VDC.
<b>Dissipation Factor(tanδ)</b>	≤0.2%(1KHz、1.0Vrms、20℃)
<b>Withstand Voltage</b>	1.5U <sub>R</sub> (10s)
<b>Insulation resistance</b>	IR≥10 000MΩ (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≤20mm will 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 ( $\mu$ F)	Voltage	Dimensions (mm)				
		W $\pm$ 0.5	H $\pm$ 0.5	T $\pm$ 0.5	P $\pm$ 1.0	d $\pm$ 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 ( $\mu$ F)	Voltage	Dimensions (mm)				
		W $\pm$ 0.5	H $\pm$ 0.5	T $\pm$ 0.5	P $\pm$ 1.0	d $\pm$ 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

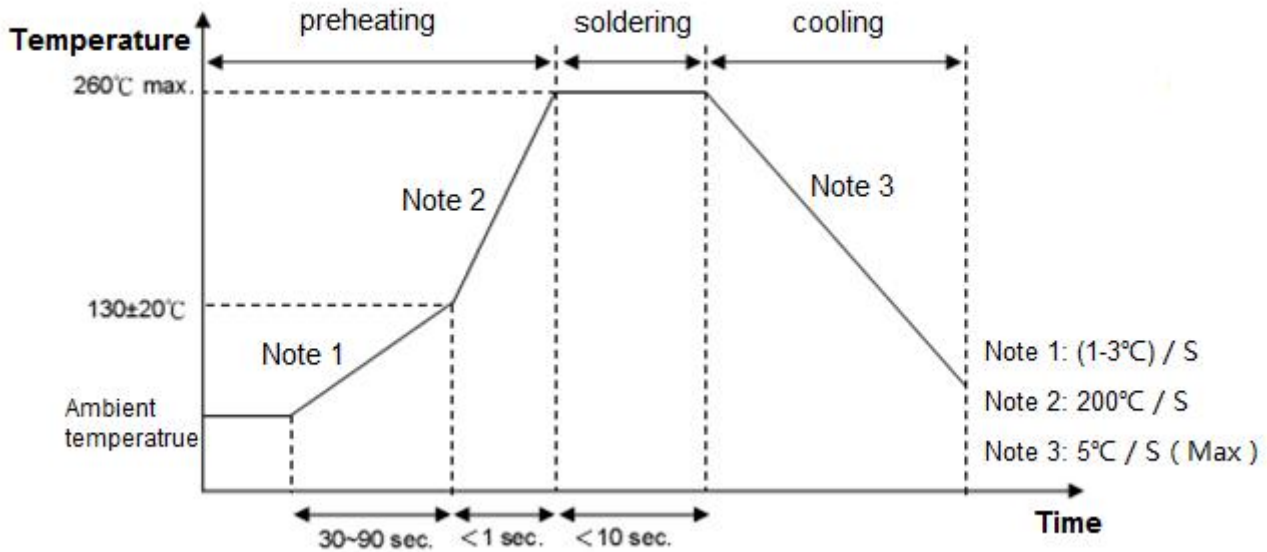
## Marking:

Example	Meaning		
	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 curve



### Iron soldering conditions:

Item	Conditions
The temperature of the tip of the soldering iron	$360^\circ\text{C}$ Max.
Soldering time	3S Max.
Distance between soldering position and coating	2mm Min.