MEF/CL21X Miniature Metallized Polyester Film Capacitors (Dipped-Type) Data Sheet

Feature

■Wide capacitance range from 0.001uF to 1.0uF.

■Operating Temperature: -40℃～125℃.

(+105℃ to +125℃ decreasing factor1.25%per ℃ for VR DC).

■Storage Temperature: 15℃~35℃.

■Self-healing property.

■Metallized polyester film, non-inductive construction.

■Small size.

■Epoxy resin sealing.

Applications

■Suitable blocking, By-passing, and coupling.

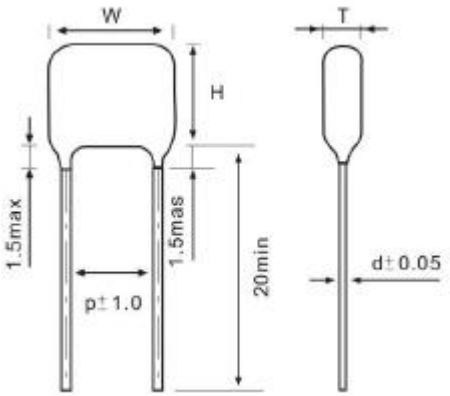
■Widely used in filter and low pulse circuit.

Part numbering on request.

Specifications

Climatic Category	40/100/21
Rated Voltage	50VDC、63VDC、100VDC
Dissipation Factor (tanδ)	≤1.0%(1KHz、1.0Vrms、20℃)
Withstand Voltage	$1.6U_R$ (5s)
Insulation Resistance (I.R.)	C≤0.33uF, IR≥15000MΩ C＞0.33uF, IR≥5000S (AT 100VDC、60SEC、20℃)

Dimensions (mm)

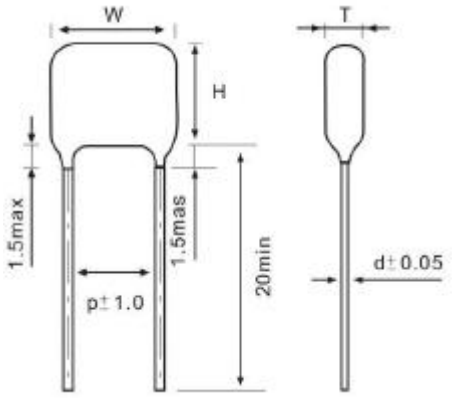
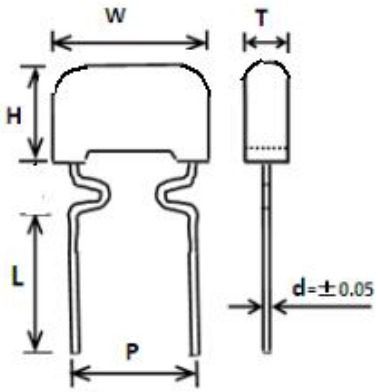


Capacitance (uF)	Rated Voltage	Size (mm)				
		W Max	H Max	T Max	P±1.0	d±0.05
0.001	50VD / 63VDC	7.5	7.0	3.5	5.0	0.5
	100VDC	7.5	7.0	3.5	5.0	0.5
0.0012	50VD / 63VDC	7.3	7.0	3.5	5.0	0.5
	100VDC	7.3	7.0	3.5	5.0	0.5
0.0015	50VD / 63VDC	7.3	7.0	4.0	5.0	0.5
	100VDC	7.3	7.0	4.0	5.0	0.5
0.0018	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0022	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0027	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0033	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0039	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0047	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0056	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0068	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.0082	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5

Capacitance (uF)	Rated Voltage	Size (mm)				
		W Max	H Max	T Max	P±1.0	d±0.05
0.01	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.012	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.015	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.018	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.022	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.027	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.033	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.039	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.047	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.056	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.068	50VD / 63VDC	7.3	7.5	4.0	5.0	0.5
	100VDC	7.3	7.5	4.0	5.0	0.5
0.082	50VD / 63VDC	7.3	8.0	4.5	5.0	0.5
	100VDC	7.3	8.0	4.5	5.0	0.5
0.1	50VD / 63VDC	7.3	9.5	4.5	5.0	0.5
	100VDC	7.5	9.5	4.5	5.0	0.5
0.12	50VD / 63VDC	7.5	7.5	4.0	7.5	0.6
	100VDC	10.5	7.5	4.0	7.5	0.6
0.15	50VD / 63VDC	10.5	9.0	4.0	7.5	0.6
	100VDC	10.3	9.0	4.0	7.5	0.6
0.22	50VD / 63VDC	10.3	9.5	4.5	7.5	0.6
	100VDC	10.3	9.5	4.5	7.5	0.6
0.27	50VD / 63VDC	10.3	10.0	5.0	7.5	0.6
	100VDC	10.3	10.0	5.0	7.5	0.6
0.33	50VD / 63VDC	10.3	10.0	5.0	7.5	0.6
	100VDC	10.3	10.5	5.5	7.5	0.6

Capacitance (uF)	Rated Voltage	Size (mm)				
		W Max	H Max	T Max	P±1.0	d±0.05
0.39	50VD / 63VDC	10.3	10.0	5.0	7.5	0.6
	100VDC	10.3	11.0	6.0	7.5	0.6
0.47	50VD / 63VDC	10.3	10.0	5.0	7.5	0.6
	100VDC	10.3	11.5	6.5	7.5	0.6
0.56	50VD / 63VDC	10.3	10.0	5.5	7.5	0.6
	100VDC	10.3	11.5	7.0	7.5	0.6
0.68	50VD / 63VDC	10.3	10.0	5.5	7.5	0.6
	100VDC	10.3	12.0	8.0	7.5	0.6
0.82	50VD / 63VDC	10.3	10.0	6.5	7.5	0.6
	100VDC	10.3	13.0	9.0	7.5	0.6
1.0	50VD / 63VDC	10.5	10.5	7.0	7.5	0.6
	100VDC	10.5	14.0	9.5	7.5	0.6

Lead Configuration

Lead Style	Drawing	Lead Length L (mm)
Long Straight		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0
Inner Crimped		①[2.5≤L＜6.0]+/-0.5; ②[6.0≤L≤10]+/-1.0

Taping And Dimensions (mm)

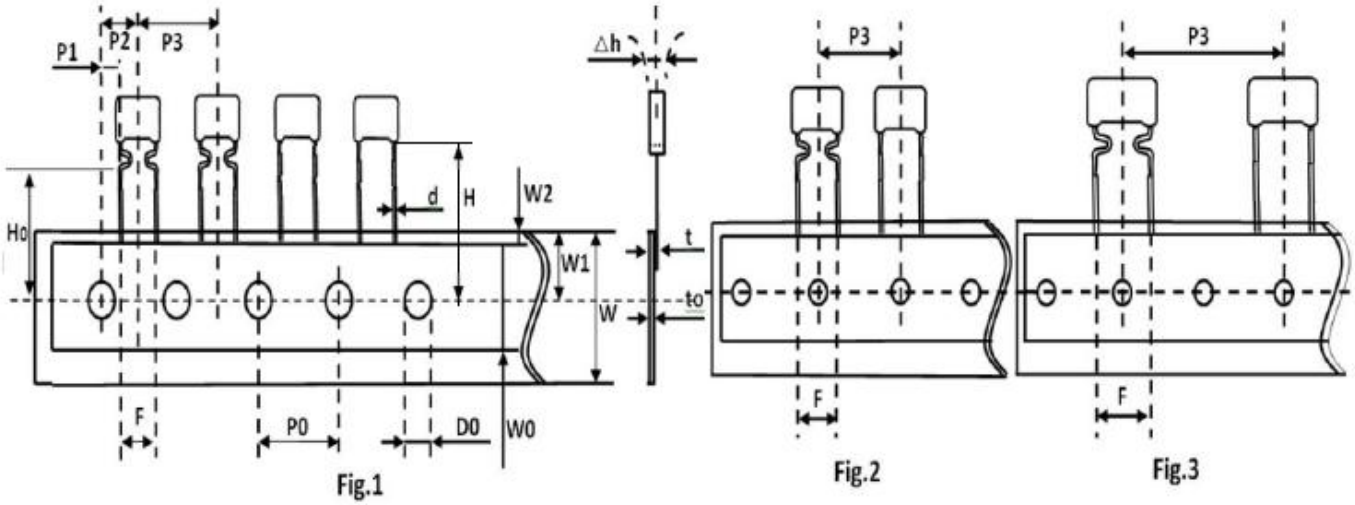
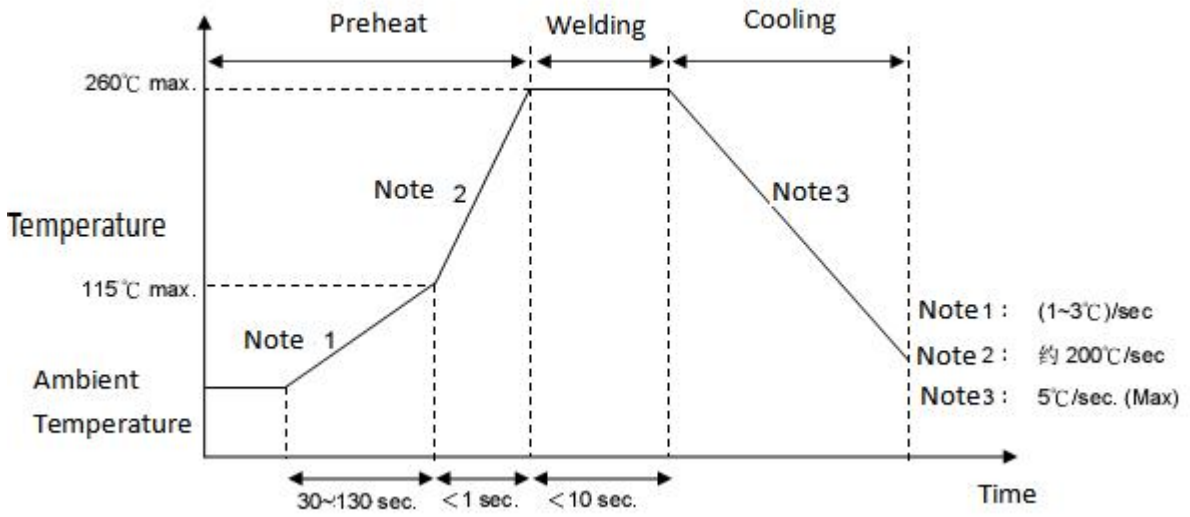


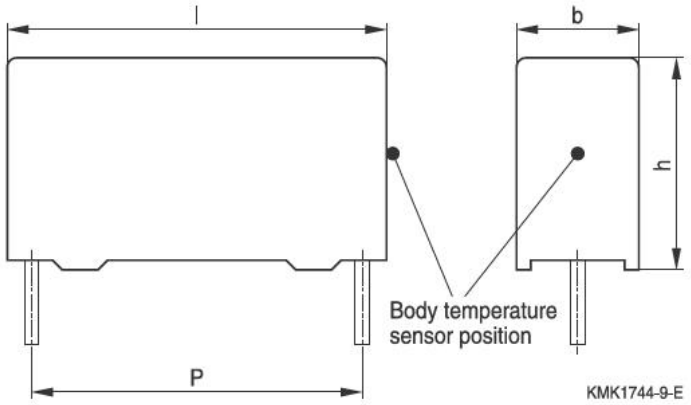
Fig.1 Fig.2 Fig.3

Symbol	Fig.1	Fig.2	Fig.2	Fig.3	Fig.3	Tolerance
	P=5.0	P=7.5	P=10	P=15	P=20/22.5	
P3	12.7	12.7	12.7	25.4	30.0	±1.0
P2	6.35	/	/	/	/	±1.3
P0	12.7	12.7	12.7	12.7	15.0	±0.3
P1	3.85	/	/	/	/	±0.7
F	5.0	7.5	10.0	15.0	20.0/22.5	±1.0
H	20.0	20.0	20.0	20.0	20.0	±1.0
H0	16.5	16.5	16.5	16.5	16.5	±0.5
Δ h	0	0	0	0	0	±2.0
W	18.0	18.0	18.0	18.0	18.0	+1.0/-0.5
W0	12.0	12.0	12.0	12.0	12.0	±1.0
W1	9.0	9.0	9.0	9.0	9.0	±0.5
W2	3.0	3.0	3.0	3.0	3.0	Max
D0	4.0	4.0	4.0	4.0	4.0	±0.3
d	0.5	0.6	0.6	0.8	0.8	±0.05
t	1.0	1.1	1.1	1.4	1.4	±0.2
t0	0.38	0.38	0.38	0.47	0.47	±0.04

Soldering Condition

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