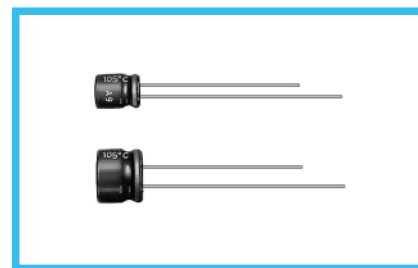


MF 5mmL, Low Impedance
series



- Low impedance over wide temperature range of -55 to $+105^{\circ}\text{C}$, with 5mm height.
- Suited for DC-DC converters where smaller case size and lower impedance are required.
- Compliant to the RoHS directive (2011/65/EU).

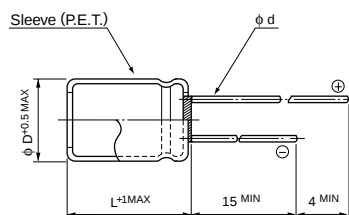
MF ← Low Impedance MT



Specifications

Item	Performance Characteristics										
Category Temperature Range	−55 to +105°C										
Rated Voltage Range	6.3 to 35V										
Rated Capacitance Range	1 to 100μF										
Rated Capacitance Tolerance	± 20% at 120Hz, 20°C										
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01CV or 3 (μA), whichever is greater.										
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz at 20°C										
	Rated voltage (V)	6.3	10	16	25	35					
	tan δ (MAX.)	0.22	0.20	0.18	0.14	0.12					
Stability at Low Temperature	Measurement frequency : 120Hz										
	Rated voltage (V)		6.3	10	16	25	35				
	Impedance ratio ZT / Z20 (MAX.)	Z−25°C / Z+20°C	2	2	2	2	2				
		Z−55°C /Z+20°C	4	4	3	3	3				
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 105°C.										
							Capacitance change	Within ±20% of the initial capacitance value			
							tan δ	200% or less than the initial specified value			
	Leakage current		Less than or equal to the initial specified value								
Shelf Life	After storig the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.										
Marking	Printed with white color letter on dark brown sleeve.										

Radial Lead Type



φD	4	5	6.3
P	1.5	2.0	2.5
φd	0.45	0.45	0.45

Type numbering system (Example : 25V $10\mu\text{F}$)

1	2	3	4	5	6	7	8	9	10	11	
U	M	F	1	E	1	0	0	M	D	D	
										Configuration ※	
		Capacitance tolerance (± 20%)									
		Rated capacitance (10μF)									
										Rated voltage (25V)	
											Series name
											Type

※ Configuration

φD	Pb-free leadwire Pb-free PET sleeve
4 to 6.3	DD

Dimensions

V		6.3			10			16			25			35		
Cap. (μF)	Code	0J			1A			1C			1E			1V		
1	010													4×5	5.0	50
1.5	1R5													4×5	5.0	50
2.2	2R2													4×5	5.0	50
3.3	3R3													4×5	5.0	50
4.7	4R7										4×5	5.0	50	4×5	5.0	50
6.8	6R8										4×5	5.0	50	5×5	2.6	80
10	100							4×5	5.0	50	5×5	2.6	80	5×5	2.6	80
15	150							5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115
22	220	4×5	5.0	50	5×5	2.6	80	5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115
33	330	5×5	2.6	80	5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115			
47	470	5×5	2.6	80	6.3×5	1.3	115	6.3×5	1.3	115						
68	680	6.3×5	1.3	115												
100	101	6.3×5	1.3	115												

Max. Impedance (Ω) at 20°C 100kHz
Rated ripple current (mA rms) at 105°C 100kHz

Frequency coefficient of rated ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more
Coefficient	0.35	0.50	0.64	0.83	1.00

Please refer to page 20, 21, 22 about the formed or taped product spec.
Please refer to page 4 for the minimum order quantity.

CAT.8100C