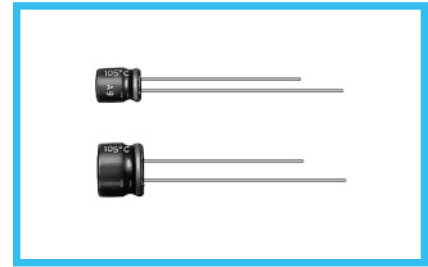


**MF** 5mmL, Low Impedance  
series



- 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 (2002/95/EC).

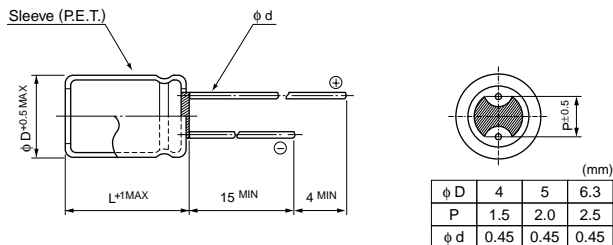
MF Low Impedance MT



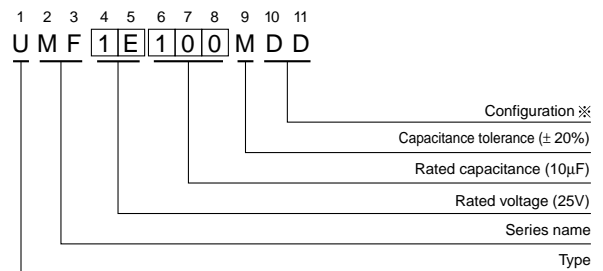
## Specifications

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, Temperature : 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	Z−25°C / Z+20°C	2	2	2	2	2
	ZT / Z20 (MAX.)	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



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



※Configuration

$\phi D$	Pb-free leadwire Pb-free PET sleeve
4 to 6.3	DD

## Dimensions

V	6.3	10	16	25	35
Cap.( $\mu\text{F}$ )	0J	1A	1C	1E	1V
1	010				4 $\times$ 5 5.0 50
1.5	1R5				4 $\times$ 5 5.0 50
2.2	2R2				4 $\times$ 5 5.0 50
3.3	3R3				4 $\times$ 5 5.0 50
4.7	4R7			4 $\times$ 5 5.0 50	4 $\times$ 5 5.0 50
6.8	6R8			4 $\times$ 5 5.0 50	5 $\times$ 5 2.6 80
10	100		4 $\times$ 5 5.0 50	5 $\times$ 5 2.6 80	5 $\times$ 5 2.6 80
15	150		5 $\times$ 5 2.6 80	6.3 $\times$ 5 1.3 115	6.3 $\times$ 5 1.3 115
22	220	4 $\times$ 5 5.0 50	5 $\times$ 5 2.6 80	6.3 $\times$ 5 1.3 115	6.3 $\times$ 5 1.3 115
33	330	5 $\times$ 5 2.6 80	5 $\times$ 5 2.6 80	6.3 $\times$ 5 1.3 115	6.3 $\times$ 5 1.3 115
47	470	5 $\times$ 5 2.6 80	6.3 $\times$ 5 1.3 115	6.3 $\times$ 5 1.3 115	
68	680	6.3 $\times$ 5 1.3 115			Case size $\phi D \times L$ (mm)
100	101	6.3 $\times$ 5 1.3 115			Impedance
					Rated ripple

Max. Impedance ( $\Omega$ ) at  $20^{\circ}\text{C}$  100kHz  
Rated ripple current (mA rms) at  $105^{\circ}\text{C}$  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.8100Y