



**THE DATASHEET OF
F1C100**



UMF

5mmL, Low Impedance



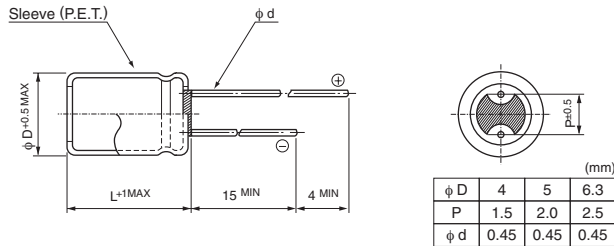
- Low impedance over wide temperature range of -55 to $+105^{\circ}\text{C}$, with 5mm height.
- Suited for DC-DC converters where smaller case size and lower impedance are required.
- Compliant to the RoHS directive (2011/65/EU).



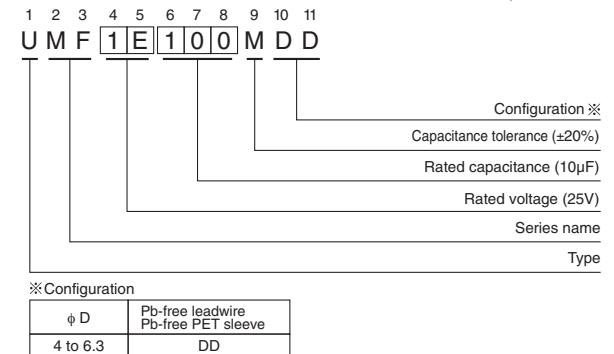
Specifications

Item	Performance Characteristics																	
Category Temperature Range	-55 to $+105^{\circ}\text{C}$																	
Rated Voltage Range	6.3 to 35V																	
Rated Capacitance Range	1 to $100\mu\text{F}$																	
Rated Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C																	
Leakage Current	After 2 minutes' application of rated voltage at 20°C , leakage current is not more than 0.01CV or $3(\mu\text{A})$, whichever is greater.																	
Tangent of loss angle ($\tan \delta$)	Measurement frequency : 120Hz at 20°C																	
	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> </tr> <tr> <td>$\tan \delta$ (MAX.)</td> <td>0.22</td> <td>0.20</td> <td>0.18</td> <td>0.14</td> <td>0.12</td> </tr> </table>	Rated voltage (V)	6.3	10	16	25	35	$\tan \delta$ (MAX.)	0.22	0.20	0.18	0.14	0.12					
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Stability at Low Temperature	Measurement frequency : 120Hz																	
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Rated voltage (V)	6.3	10	16	25	35													
Impedance ratio	Z- 25°C / Z+ 20°C	2	2	2	2													
ZT / Z20 (MAX.)	Z- 55°C / Z+ 20°C	4	4	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 $\pm 20\%$ of the initial capacitance value																
	$\tan \delta$	200% or less than the initial specified value																
Shelf Life	After storing 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.																	
	Leakage current	Less than or equal to the initial specified value																
Marking	Printed with white color letter on dark brown sleeve.																	

Radial Lead Type



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



Dimensions

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

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