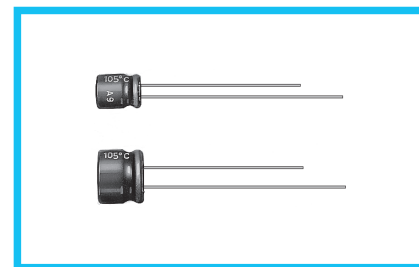


UMF

5mmL, Low Impedance



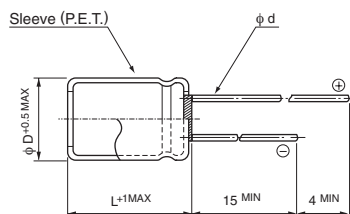
- Low impedance over wide temperature range of -55 to $+105^{\circ}\text{C}$, with 5mm height.
- Suited for DC-DC converters where smaller case size and lower impedance are required.
- Compliant to the RoHS directive (2011/65/EU).



Specifications

Item	Performance Characteristics										
Category Temperature Range	-55 to +105°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 at 20°C, 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	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		
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.										
							Leakage current		Less than or equal to the initial specified value		
Marking	Printed with white color letter on dark brown sleeve.										

Radial Lead Type



	4	5	6.3
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 μF)

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 ($\pm 20\%$)							
			Rated capacitance (10 μF)							
			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										Case size φD×L (mm)	Impedance	Rated ripp
100	101	6.3×5	1.3	115												

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

Max. Impedance (Ω) at 20°C 100kHz
 Rated ripple current (mA_{RMS}) at 105°C 100kHz

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