



- •Bi-polarized series with 5mm height.
- Compliant to the RoHS directive (2011/65/EU).

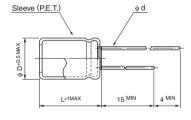


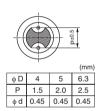


### ■Specifications

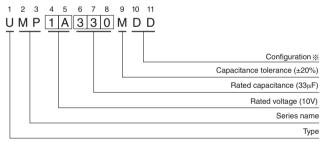
Item	Performance Characteristics										
Category Temperature Range	−40 to +85°C										
Rated Voltage Range	6.3 to 50V 0.1 to 47μF										
Rated Capacitance Range											
Rated Capacitance Tolerance	±20% at 120Hz, 20°C										
Leakage Current	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.05CV or 10 (µA), whichever is greater.										
	Measurement frequency: 120Hz at 20°C										
Tangent of loss angle (tan $\delta$ )	Rated voltage (V)	6.3	1	0	16	25	35		50		
	tan δ (MAX.)	0.24	0.2	20	0.17	0.17	0.	15	0.15		
	Measurement frequency: 120Hz										
OLD 177	Rated voltage (V)			6.3	10	16	25	35	50		
Stability at Low Temperature	Impedance ratio	Z-25°C / Z+20°C Z-40°C / Z+20°C		4	3	2	2	2	2		
	ZT / Z20 (MAX.)			8	6	4	4	3	3		
	The specifications listed at right shall be met Capacitance change   Within ±20% of the initial capacitance value										 7
Endurance	when the capacitors are restored to 20°C after				tan δ	ioo onango	200% or less than the initial specified value				1
21144141100	the rated voltage is	Leakage current Less than or equa				to the initial specified value					
	85°C with the polarity inverted every 250 hours.										
Shelf Life	After storing the capacitors under no load at 85°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.								01-4		
Marking	Printed with white color letter on black sleeve.										

## ■ Radial Lead Type





# Type numbering system (Example : 10V $33\mu F$ )



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

#### Dimensions

	V	6.3		10		16		25		35		50	
Cap.(μF)	Code	0J		1A		1C		1E		1V		1H	
0.1	0R1				!		!		-			4×5	1.0
0.22	R22		i		į		i		į		į	4×5	2.0
0.33	R33		I I		l I		I I		İ		-	4×5	2.8
0.47	R47		!		!		-		!		-	4×5	4.0
1	010								-			4×5	8.4
2.2	2R2		i I		i I		1		İ	4×5	8.4	5×5	13
3.3	3R3		!		!		1	5×5	12	5×5	16	5×5	17
4.7	4R7					4×5	12	5×5	16	5×5	18	6.3×5	20
10	100		-	4×5	17	5×5	23	6.3×5	27	6.3×5	29		
22	220	5×5	28	6.3×5	33	6.3×5	37		1				
33	330	6.3×5	37	6.3×5	41	6.3×5	49		1			Case size	Rated
47	470	6.3×5	45				į –		i		i	$\phi D \times L (mm)$	ripple

Rated ripple current (mArms) at 85°C 120Hz

## • Frequency coefficient of rated ripple current

1 /						
Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more	
Coefficient	0.70	1.00	1.17	1.36	1.50	

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