

7mmL, Bi-Polarized



- Bi-polarized series with 7mm height.
- Extended capacitance range by an addition of φ8 product.
- Compliant to the RoHS directive (2011/65/EU).

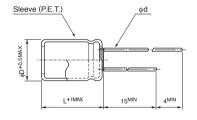




## ■Specifications

Item	Performance Characteristics										
Category Temperature Range	-40 to +85°C										
Rated Voltage Range	6.3 to 50V										
Rated Capacitance Range	0.1 to 220µF										
Capacitance Tolerance	±20% at 120Hz, 20°C	±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 ( $\mu$ A), whichever is greater.								reater.		
					Me	easurem	ent freq	uency: 12	0Hz at 20°C		
Tangent of loss angle (tan $\delta$ )	Rated voltage (V) 6.3	10	)	16	25	25		5	50		
	tan δ (MAX.) 0.24	.24 0.20		0.16	0.1	6	0.14		0.12	]	
	Measurement frequency : 120 Hz										
Stability at Law Tamparatura	Rated voltage (V)	oltage (V)		10	16		25	35	50		
Stability at Low Temperature	Impedance ratio Z-25°C / Z+2	0°C	4	3	2		2	2	2		
	ZT / Z20 (MAX.) Z-40°C / Z+2	0°C	8	6	4		4	3	3		
	The specifications listed at right shall be met									7	
Endurance	when the capacitors are restored to	tter 🛨	Capacitance change tan δ			Within ±20% of the initial capacitance value 200% or less than the initial specified value					
Endurance	the rated voltage is applied for 2000 nours at								+		
	85°C with the polarity inverted every 250 hours. Leakage current Less than or equal to the initial specified value									_	
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.							5101-4			
Marking	Printed with white color letter on black sleeve.										

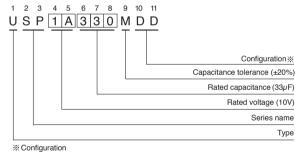
## ■ Radial Lead Type





				(111111)
φD	4	5	6.3	8
Р	1.5	2.0	2.5	3.5
φd	0.45	0.45	0.45	0.5

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



* Comiguratio	11
φD	Pb-free leadwire Pb-free PET sleeve
4 to 8	DD

# ■ Dimensions

	V	6.3		10		16		25		35		50	
Cap.(μF)	Code	0J		1A		1C		1E		1V		1H	
0.1	0R1											4 × 7	1.0
0.22	R22				į		į					4×7	2.3
0.33	R33				1		1		1			4 × 7	3.5
0.47	R47				-		1					4 × 7	5.0
1	010				į		į					4 × 7	10
2.2	2R2				1		1				_	4 × 7	14
3.3	3R3				-		-		-	4 × 7	16	5×7	20
4.7	4R7				i	4 × 7	18	5 × 7	21	5 × 7	22	6.3 × 7	27
10	100		_	4 × 7	24	5 × 7	∤ 30	6.3 × 7	¦ 35	6.3 × 7	37	8 × 7	44
22	220			5 × 7	40	6.3 × 7	51	6.3 × 7	53	8 × 7	62	8 × 7	65
33	330	5×7	42	6.3 × 7	56	6.3 × 7	63	8 × 7	73	8 × 7	76		
47	470	6.3 × 7	58	6.3 × 7	67	6.3 × 7	75	8 × 7	l 87		1		_
100	101	8 × 7	95	8 × 7	110	8 × 7	125				!	Case size	Rated
220	221	8×7	140		1		1		i I		į –	φD×L (mm)	Rated

#### • Frequency coefficient of rated ripple current

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

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

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