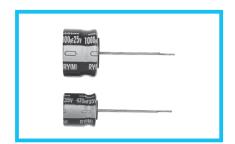


12.5mmL Wide Temperature Range



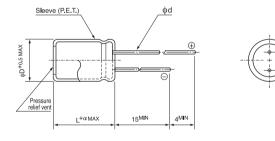
- 12.5mmL height.
- Compliant to the RoHS directive (2011/65/EU).



■Specifications

Item					D	o vf o vo		Charasta	riotico					
		Performance Characteristics												
Category Temperature Range	-55 to +105°C (6.3	55 to +105°C (6.3 to 100V), -40 to +105°C (160 to 400V), -25 to +105°C (450V)												
Rated Voltage Range	6.3 to 450V	.3 to 450V												
Rated Capacitance Range	6.8 to 4700µF	8 to 4700μF												
Capacitance Tolerance	±20% at 120Hz, 20	°C												
	Rated voltage (V)				100						160	to 450		
Leakage Current		After 1 minute's application of rated voltage at 20° C, leakage current is not more than 0.03CV or4 (μ A), whichever is greater. After 2 minutes' application of rated voltage at 20° C, leakage current is not more than 0.01CV or 3 (μ A), whichever is greater. After 1 minute's application of rated voltage I = 0.04CV+100 (μ A) or less						l voltage a	at 20°C,					
	For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF. Measurement frequency: 120Hz at 20°C													
Tangent of loss angle (tan δ)	Rated voltage (V)		10		16	25	_	35	50	63				400 to 450
	tan δ (MAX.)	0.28 0	.24	0.	.20	0.1	6	0.14	0.12	0.1	0 0	0.08	0.20	0.25
	Measurement frequency : 120Hz Rated voltage (V) 6.3 10 16 25 35 to 50 63 to 100 160 to 200 250 to 350 400 450													
Stability at Low Temperature	Rated vo	<u> </u>	6.	_	10		16	25						450
	Impedance ratio ZT / Z20 (MAX.)	Z-25°C / Z+20°C Z-40°C / Z+20°C			4 8		3 6	4	3	3	3	8	10	15
Endurance	The specifications I the capacitors are r	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105°C. Capacitance change Within $\pm 20\%$ of the initial capacitance voltage with $\pm 20\%$ or less than the initial specified value of						/alue						
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.												
Marking	Printed with white c	olor letter on bla	ck slee	ve.										

■Radial Lead Type

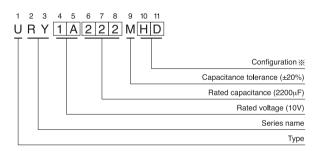


~	(φD < 20) 1.5
α	$(\phi D \ge 20) 2.0$

						(mm)
φD	12.5	16	18	20	22	25
Р	5.0	7.5	7.5	10.0	10.0	12.5
φd	0.6	0.8	0.8	1.0	1.0	1.0

• Please refer to page 20 about the end seal configuration.

Type numbering system (Example: 10V 2200µF)



※ Configuration

φD	Pb-free leadwire Pb-free PET sleeve
12.5 to 18	HD
20 to 25	RD

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



■Dimensions

	V	6.3		10		16		25		35		50	
Cap.(µF)	Code	0J		1A		1C		1E		1V		1H	
330	331											12.5 × 12.5	450
470	471				<u> </u>					12.5 × 12.5	420	20 × 12.5	540
680	681				!			12.5×12.5	500	18 × 12.5	610	25 × 12.5	700
1000	102					12.5 × 12.5	520	18 × 12.5	770	22 × 12.5	810		
2200	222	12.5 × 12.5	580	18 × 12.5	820	25 × 12.5	1000	25 × 12.5	1170		İ		İ
3300	332	18 × 12.5	730	22 × 12.5	1030				-		!	Case size	Rated
4700	472	25 × 12.5	1200		_						_	$\phi D \times L (mm)$	ripple

	V	63		100		160		200		250		315	
Cap.(µF)	Code	1J		2A		2C		2D		2E		2F	
10	100		<u> </u>		!		1					12.5 × 12.5	70
22	220		į		į		į	12.5 × 12.5	110	16 × 12.5	130	16 × 12.5	85
33	330		1		1	12.5 × 12.5	¦ 130	16 × 12.5	¦ 170	18 × 12.5	¦ 170	20 × 12.5	120
47	470		!		!	16 × 12.5	210	18 × 12.5	230	22 × 12.5	190	25 × 12.5	160
68	680		i		i	20 × 12.5	280	25 × 12.5	310		i		
100	101		İ	12.5 × 12.5	230	25 × 12.5	360		İ		İ		İ
220	221	12.5 × 12.5	400	22 × 12.5	400				_		1		
330	331	18 × 12.5	550										
470	471	22 × 12.5	610		i				į		į –		

	V	350		400		450		
Cap.(µF)	Code	2V		2G		2W		
6.8	6R8					12.5 × 12.5	38	
10	100	16 × 12.5	75	16 × 12.5	65	16 × 12.5	47	
22	220	18 × 12.5	90	20 × 12.5	150	25 × 12.5	85	
33	330	25 × 12.5	140	25 × 12.5	200			

Rated ripple current (mArms) at 105°C 120Hz

• Frequency coefficient of rated ripple current

V	Cap.(µF) Frequency	50Hz	120Hz	300Hz	1 kHz	10 kHz or more
6.3 to 100	100 to 680	0.80	1.00	1.23	1.34	1.50
0.3 10 100	1000 to 4700	0.85	1.00	1.10	1.13	1.15
160 to 450	6.8 to 100	0.80	1.00	1.25	1.40	1.60