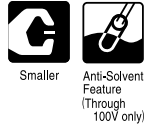
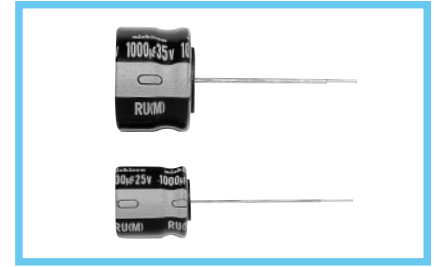
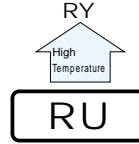


**RU** 12.5mmL  
series



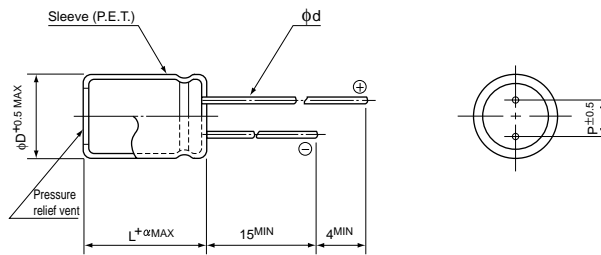
- 12.5mmL height.
- Adapted to the RoHS directive (2002/95/EC).



## Specifications

Item	Performance Characteristics											
Category Temperature Range	-40 ~ +85°C (6.3V ~ 400V), -25 ~ +85°C (450V)											
Rated Voltage Range	6.3 ~ 450V											
Rated Capacitance Range	6.8 ~ 6800µF											
Capacitance Tolerance	±20% at 120Hz, 20°C											
Leakage Current	Rated voltage (V)	6.3 ~ 100V										
		160 ~ 450V										
	After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 (µA), whichever is greater.											
	After 1 minute's application of rated voltage, I = 0.04CV+100 (µA) or less											
tan δ	For capacitance of more than 1000µF, add 0.02 for every increase of 1000µF. Measurement frequency : 120Hz, Temperature : 20°C											
	Rated voltage (V)	6.3 10 16 25 35 50 63 100 160 ~ 350 400 ~ 450										
	tan δ (MAX.)	0.28 0.24 0.20 0.16 0.14 0.12 0.12 0.12 0.20 0.25										
Stability at Low Temperature	Measurement frequency : 120Hz											
	Rated voltage (V)	6.3	10	16	25	35	50~100	160~200	250~350	400	450	
	Impedance ratio	Z-25°C / Z+20°C	5	4	3	2	2	2	3	4	6	15
	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	12	10	8	5	4	3	4	8	10	—
Endurance	After 2000 hours' application of rated voltage at 85°C, capacitors meet the characteristic requirements listed at right.											
	Capacitance change	tan δ										
	Leakage current											
	Within ±20% of initial value	200% or less of initial specified value										
	Initial specified value or less											
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the specified value for endurance characteristics listed above.											
Marking	Printed with white color letter on black sleeve.											

## Radial Lead Type

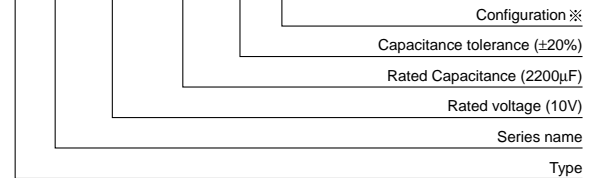


α	(φD < 20)	1.5
	(φD ≥ 20)	2.0

	(mm)					
φD	12.5	16	18	20	22	25
P	5.0	7.5	7.5	10	10	12.5
φd	0.6	0.8	0.8	1.0	1.0	1.0

## Type numbering system (Example : 10V 2200µF)

1 2 3 4 5 6 7 8 9 10 11  
U R U 1 A 2 2 2 M H D



※ Configuration

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

- Please refer to page 21 about the end seal configuration.

Please refer to page 21, 22, 23 about the formed or taped product spec.  
Please refer to page 3 for the minimum order quantity.

• Dimension table in next page.

### ■ Dimensions

V		6.3		10		16		25		35		50	
Cap. (μF)	Code	0J		1A		1C		1E		1V		1H	
330	331											12.5×12.5	530
470	471											16×12.5	600
680	681									12.5×12.5	720	20×12.5	750
1000	102							12.5×12.5	750	18×12.5	850	25×12.5	930
2200	222			12.5×12.5	870	20×12.5	1200	25×12.5	1380				
3300	332	16×12.5	800	18×12.5	1100	25×12.5	1410						
4700	472	20×12.5	1460	25×12.5	1480								
6800	682	25×12.5	1600									Case size φ D×L (mm)	Rated ripple

V		63		100		160		200		250		315	
Cap. (μF)	Code	1J		2A		2C		2D		2E		2F	
22	220							12.5×12.5	190	16×12.5	190	16×12.5	190
33	330					12.5×12.5	230	16×12.5	230	18×12.5	230	20×12.5	230
47	470					16×12.5	280	18×12.5	280	20×12.5	280	25×12.5	280
68	680					18×12.5	330	22×12.5	330	25×12.5	330		
100	101			12.5×12.5	330	22×12.5	380	25×12.5	380				
220	221	12.5×12.5	490	22×12.5	620								
330	331	18×12.5	710	25×12.5	760								
470	471	22×12.5	900										
680	681	25×12.5	1200										

V		350		400		450	
Cap. (μF)	Code	2V		2G		2W	
6.8	6R8					12.5×12.5	70
10	100	12.5×12.5	110	16×12.5	110	16×12.5	80
22	220	18×12.5	230	20×12.5	230	22×12.5	160
33	330	20×12.5	230	25×12.5	280		
47	470	25×12.5	280				

Rated Ripple (mA rms) at 85°C 120Hz

### ● Frequency coefficient of rated ripple current

V	Cap. (μF)	Frequency				
		50Hz	120Hz	300Hz	1 kHz	10 kHz ~
6.3 ~ 100	100 ~ 680	0.80	1.00	1.23	1.34	1.50
	1000 ~ 6800	0.85	1.00	1.10	1.13	1.15
160 ~ 450	6.8 ~ 100	0.80	1.00	1.25	1.40	1.60