

## PU series Ultra Low ESR $\leq 7m\Omega$

### Features

- ◆ Ultra Low ESR at high frequency range.
- ◆ Ultra Large permissible ripple current.



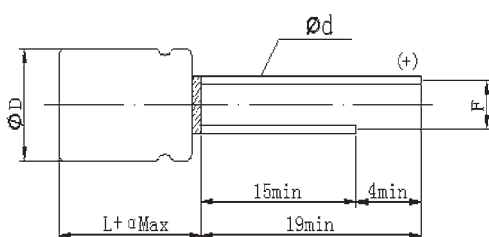
### Specifications

Item	Performance Characteristics	
Operating Temperature Range	-55~+105°C	
Rated Voltage Range	2.5~10 VDC	
Capacitance Range	180 to 3500 $\mu$ F	
Capacitance Tolerance	$\pm 20\%$ (120Hz,+20°C)	
Leakage Current (+20°C,max.)	$\leq 0.2CV$ ( $\mu$ A, after 2 minutes)	
Dissipation Factor (tan $\delta$ , at 20°C , 120Hz)	Not to exceed the value specified	
ESR ( 100K~300KHz )	Not to exceed the value specified	
Endurance 105°C , 2000h , at rated voltage	Capacitance Change	Within $\pm 20\%$ of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified
Moisture Resistance Stored at 60°C , RH90~95% , 1000h	Capacitance Change	Within $\pm 20\%$ of the value before test
	Leakage current	Not to exceed the value specified
	ESR	Not to exceed 150% of the value specified
	Dissipation Factor	Not to exceed 150% of the value specified

### Frequency Coefficient for Ripple Current

Frequency	120Hz $\leq$ freq.<1KHz	1KHz $\leq$ freq.<10KHz	10KHz $\leq$ freq.<100KHz	100KHz $\leq$ freq.<300KHz
Coefficient	0.05	0.3	0.7	1

### Diagram of Dimensions:(unit:mm)



$\phi D \times L$	$\phi D + 0.5\text{max.}$	$\alpha$	$F \pm 0.5$	$\phi d \pm 0.05$
8×8	8.0	1.0	3.5	0.6
8×11.5	8.0	1.5	3.5	0.6
10×12.5	10.0	1.5	5.0	0.6

## Dimensions & Characteristics

φ D×L(mm)

W.V. (V)	Capacitance (μF)	L.C. (μA, 2min)	tg δ (120Hz, 20°C)	ESR (mΩ, 100KHZ)	Maximum Permissible Ripple Current(mA, r.m.s)	Size Φ D×L(mm)
2.5	560	280	0.08	7	6100	8×8 8×11.5
	680	340	0.08	7	6100	8×8 8×11.5
	820	410	0.08	7	6100	8×8 8×11.5
	1000	500	0.08	7	6100	8×11.5
	1200	600	0.08	7	6100	8×11.5
	1500	750	0.08	7	6100	8×11.5
					7100	10×12.5
	2000	1000	0.08	7	6100	8×11.5
					7100	10×12.5
	2500	1250	0.08	7	7100	10×12.5
	2700	1350	0.08	7	7100	10×12.5
	3000	1500	0.08	7	7100	10×12.5
	3300	1650	0.08	7	7100	10×12.5
3500	1750	0.08	7	7100	10×12.5	
4	560	224	0.08	7	6100	8×8 8×11.5
	680	272	0.08	7	6100	8×8 8×11.5
	820	328	0.08	7	6100	8×8 8×11.5
					6600	10×12.5
	1000	800	0.08	7	6100	8×8
					6100	8×11.5
					6600	10×12.5
	1200	960	0.08	7	6100	8×11.5
					6600	10×12.5
	1500	1200	0.10	7	6100	8×11.5
					6600	10×12.5
2000	1600	0.10	7	6600	10×12.5	
2500	1500	0.10	7	6600	10×12.5	
6.3	180	113.4	0.10	7	6100	8×8 8×11.5
	220	138.6	0.10	7	6100	8×8 8×11.5
	270	170	0.10	7	6100	8×8 8×11.5
	330	207.9	0.10	7	6100	8×8 8×11.5
	390	245.7	0.10	7	6100	8×8 8×11.5
	470	296.1	0.10	7	6100	8×8 8×11.5
	560	352	0.08	7	6100	8×8 8×11.5
	680	428.4	0.08	7	6100	8×8
					6600	8×11.5/10×12.5
	820	516.6	0.10	7	6100	8×8
					6600	8×11.5/10×12.5
	1000	630	0.10	7	7100	8×11.5/10×12.5
	1200	756	0.10	7	7100	8×11.5/10×12.5
	1500	945	0.10	7	7100	10×12.5
	2000	1260	0.10	7	7100	10×12.5
2500	1575	0.10	7	7100	10×12.5	
10	180	180	0.08	7	6600	8×11.5
	220	220	0.08	7	6600	8×11.5
	270	270	0.08	7	6600	8×11.5
	330	330	0.08	7	6600	8×11.5
	390	390	0.08	7	6600	8×11.5
	470	470	0.08	7	6600	8×11.5/10×12.5
	560	560	0.08	7	6600	8×11.5/10×12.5
	680	680	0.10	7	6600	8×11.5/10×12.5
	820	820	0.10	7	7100	8×11.5/10×12.5
	1000	1000	0.10	7	7100	10×12.5
	1200	1200	0.10	7	7100	10×12.5
	1500	1500	0.10	7	7100	10×12.5

Ripple Current ( mA, rms ) at 105°C, 100KHz

## Size List

φ D×L(mm)

WV (SV) Cap(μF)	2.5 (2.8)	4 (4.6)	6.3 (7.2)	10 (11.5)
180			8×8/8×11.5	8×11.5
220			8×8/8×11.5	8×11.5
270			8×8/8×11.5	8×11.5
330			8×8/8×11.5	8×11.5
390			8×8/8×11.5	8×11.5
470			8×8/8×11.5	8×11.5/10×12.5
560	8×8/8×11.5	8×8/8×11.5	8×8/8×11.5	8×11.5/10×12.5
680	8×8/8×11.5	8×8/8×11.5	8×8/8×11.5/10×12.5	8×11.5/10×12.5
820	8×8/8×11.5	8×8/8×11.5/10×12.5	8×8/8×11.5/10×12.5	8×11.5/10×12.5
1000	8×11.5	8×8/8×11.5/10×12.5	8×11.5/10×12.5	10×12.5
1200	8×11.5	8×11.5/10×12.5	8×11.5/10×12.5	10×12.5
1500	8×11.5/10×12.5	8×11.5/10×12.5	8×11.5/10×12.5	
2000	8×11.5/10×12.5	10×12.5	10×12.5	
2500	10×12.5	10×12.5	10×12.5	
2700	10×12.5			
3000	10×12.5			
3300	10×12.5			
3500	10×12.5			

Ripple Current ( mA, rms ) at 105°C 100KHz