## **Radial Lead Type**

Series : **FP** Type : **A** 





#### **Features**

- High ripple current (2 to 2.5 times as high as FC series)
- Large capacitance (Up to 60 % larger than FC series)
- Endurance : 105 °C 4000 h to 5000 h
- RoHS compliant

## **Country of origin**

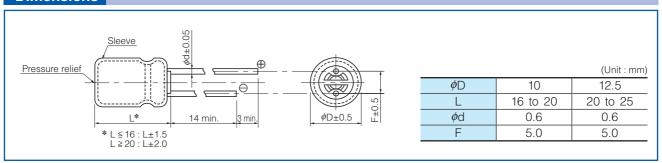
Malaysia

Specifications								
Category temperature range	−55 °C to +105 °C							
Rated voltage range	25 V.DC to 35 V.DC							
Capacitance range	510 μF to 2000 μF							
Capacitance tolerance	±20 % (120 Hz/+20 °C)							
Leakage current	I ≤ 0.01 CV (μA) After 2 minutes							
Discipation factor	V.DC	25	35	(max.) (120 Hz/+20 °C)				
Dissipation factor (tan $\delta$ )	tan $\delta$	0.14	0.12					
(tan 0)	Add 0.02 per 1000 μF for products of 1000 μF or more.							
Endurance	After following life test with DC voltage and $\pm 105$ °C $\pm 2$ °C ripple current value applied. (The sum of DC and ripple peak voltage shall not exceed the rated working voltage) when the capacitors are restored to 20 °C, the capacitors shall meet the limits specified below. Duration $\phi 10:4000$ hours, $\phi 12.5:5000$ hours							
	Capacitance change	Within ±30 % of the initial value						
	tan $\delta$	≤300 % of the initial limit						
	DC leakage current	C leakage current Within the initial limit						
Shelf life	After storage for 1000 hours at +105 °C±2 °C with no voltage applied and then being stabilized at +20 °C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)							
AEC-Q200	AEC-Q200 compliant							

## Frequency correction factor for ripple current

Rated voltage (V.DC)	Capacitance (µF)			Frequency (Hz)					
				120	1 k	10 k	100 k to		
25 to 35	510	to	1000	0.65	0.75	0.95	1.00		
	1200	to	2000	0.75	0.80	1.00	1.00		

### **Dimensions**





## Panasonic Aluminum Electrolytic Capacitors (Radial Lead Type)

## Case size/ Impedance/ Ripple current

Rated voltage (V.DC)	25 V.DC to 35 V.DC					
Case size (mm)	ES (Ω/100	Ripple current (mA r.m.s./100 kHz)				
(φD×L)	+20 °C	−10 °C	+105 °C			
10 × 16	0.068	0.136	2500			
10 × 20	0.052	0.104	3000			
12.5 × 20	0.038	0.076	3250			
12.5 × 25	0.030	0.060	4000			

## **Characteristics list**

Rated voltage (V.DC)	Cap. (±20 %) (μF)	Case size (mm)		Specification			Lead length (mm)				Min. Packaging Q'ty	
		φD	L	Ripple current (100 kHz) (+105 °C) (mA r.m.s.)	ESR (100 kHz) (+20 °C) (Ω)	Endurance (hours)	Lead dia. <i>ø</i> d	Lead	space Taping *B	Part No.	Straight leads (pcs)	Taping (pcs)
25	680	10	16	2500	0.068	4000	0.6	5.0	5.0	EEUFP1E681()	200	500
	1000	10	20	3000	0.052	4000	0.6	5.0	5.0	EEUFP1E102()	200	500
	1500	12.5	20	3250	0.038	5000	0.6	5.0	5.0	EEUFP1E152()	200	500
	2000	12.5	25	4000	0.030	5000	0.6	5.0	5.0	EEUFP1E202()	200	500
35	510	10	16	2500	0.068	4000	0.6	5.0	5.0	EEUFP1V511()	200	500
	750	10	20	3000	0.052	4000	0.6	5.0	5.0	EEUFP1V751()	200	500
	1000	12.5	20	3250	0.038	5000	0.6	5.0	5.0	EEUFP1V102()	200	500
	1300	12.5	25	4000	0.030	5000	0.6	5.0	5.0	EEUFP1V132()	200	500

 $<sup>\</sup>cdot$  When requesting taped product, please put the letter "B". Lead wire pitch \$B=-5 mm.

<sup>·</sup> Please refer to the page of "Taping dimensions".



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