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

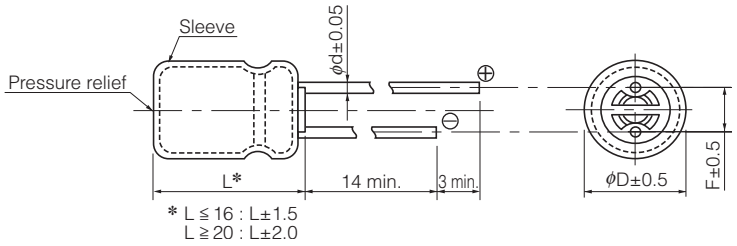
Specifications

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			
Dissipation factor (tan δ)	V.DC	25	35	(max.) (120 Hz/+20 °C)
	tan δ	0.14	0.12	
	Add 0.02 per 1000 µF for products of 1000 µF or more.			
Endurance	After following life test with DC voltage and +105 °C±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 ϕ10 : 4000 hours, ϕ12.5 : 5000 hours			
	Capacitance change	Within ±30 % of the initial value		
	tan δ	≦ 300 % of the initial limit		
	DC 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



(Unit : mm)

ϕD	10	12.5
L	16 to 20	20 to 25
ϕd	0.6	0.6
F	5.0	5.0

Case size/ Impedance/ Ripple current

Rated voltage (V.DC) / Case size (mm) (φD×L)	25 V.DC to 35 V.DC		
	ESR (Ω/100 kHz)		Ripple current (mA r.m.s./100 kHz)
	+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)			Part No.	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. φd	Lead space			Straight leads (pcs)	Taping (pcs)
								Straight	Taping ✻B			
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

· When requesting taped product, please put the letter "B". Lead wire pitch ✻B=5 mm.
· Please refer to the page of “Taping dimensions”.

Panasonic

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