



CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS

FPB Series

- High reliability is realized by hybrid electrolyte
- High Ripple Current
- -55℃~+125℃
- Endurance 125℃, 4,000hrs
- AEC-Q200 compliant : Please contact us for more details, test data, information.

FPA

Downsized

FPB



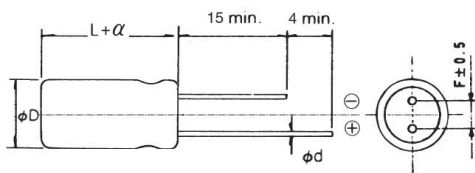
SPECIFICATIONS

Item	Characteristics					
Category temperature range	-55 to +125℃					
Rated voltage range	16 to 63Vdc					
Surge voltage	Rated Voltage(WV)	16	25	35	50	63
	Surge Voltage(SV)	18,4	29,0	40,0	57,5	72,5
Capacitance tolerance	±20% (M) (at 20℃, 120Hz)					
Tangent of loss angle	Shall not exceed the value in Ratings of FPB series, (at 20℃, 120Hz)					
Leakage Current ※ 1	Shall not exceed the value in Ratings of FPB series. (at 20℃, 2minutes)					
ESR	Shall not exceed the value in Ratings of FPB series, (at 20℃, 100kHz)					
Impedance Ratio (Characteristics at low temp.)	Impedance	Ratio				
	Z(-25℃) / Z(+20℃)	< 1,5				
	Z(-55℃) / Z(+20℃)	< 2,0 (at 100kHz)				
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 4,000 hours at 125℃. Capacitance change ≤ ±30% of the initial value Tanδ ≤ ±200% of the initial specified value ESR ≤ ±200% of the initial specified value Leakage current ≤ The initial specified value					
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 125℃ without voltage applied, The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at lest 24hours and not more than 48 hours and not more than 48 hours before the measurements. Capacitance change ≤ ±30% of the initial value Tanδ ≤ ±200% of the initial specified value ESR ≤ ±200% of the initial specified value Leakage current ≤ The initial specified value					
Bias Humidity	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them to the DC rated voltage at 85℃, 85% RH for 2000hours Capacitance change ≤ ±30% of the initial value Tanδ ≤ ±200% of the initial specified value ESR ≤ ±200% of the initial specified value Leakage current ≤ The initial specified value					

※ 1, if any doubt arises, measure the leakage current after following voltage treatment.
(Voltage treatment : Applying rated voltage for 120minutes at 125℃)

DIMENSIONS

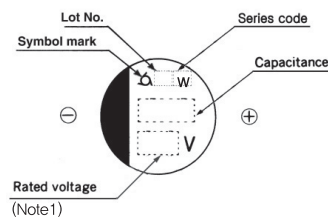
Coating Case Type



UNIT(mm)

ΦD(+0,5max.)	6,3	6,3	8	10
L	6	8	10	10
α	0,5			
Φd(±0,05)	0,45	0,5	0,6	0,6
F(±0,5)	2,5	2,5	3,5	5

MARKING



RATED RIPPLE CURRENT MULTIPLIES

Frequency(Hz)	120	1K	5K	10K	20K	30K	100K ~500K
Capacitance(μF)							
~ 10	0,03	0,30	0,50	0,60	0,70	0,75	1,00
15 ~ 33	0,07	0,30	0,50	0,60	0,70	0,75	1,00
39 ~ 150	0,10	0,40	0,60	0,70	0,80	0,80	1,00
220 ~ 560	0,13	0,45	0,65	0,75	0,85	0,85	1,00

RATINGS OF FPB Series

Case Code	Rated Voltage (V)	Rated Capacitance(μF)	ESR(mΩ) (at 100kHz)	Rated Ripple Current (mA _{rms} /125℃, 100KHz)	Tangent of loss angle	Leakage Current (μA)
6.3X6	16	150	45	1,080	0.16	24
	25	68	50	1,300	0.14	17
	25	82	50	1,300	0.14	21
	25	100	50	1,300	0.14	25
	35	56	60	1,200	0.12	20
	35	68	60	1,200	0.10	24
6.3X8	16	220	27	1,800	0.16	35
	25	150	30	1,800	0.14	38
	25	180	30	1,800	0.14	45
	35	100	35	1,700	0.12	35
	35	120	35	1,700	0.12	42
8X10	16	470	20	2,000	0.16	75
	25	270	22	2,000	0.14	68
	25	330	22	2,000	0.14	83
	35	180	22	2,000	0.12	63
	35	220	22	2,000	0.12	77
	50	82	30	1,700	0.10	41
	63	56	40	1,700	0.08	35
10X10	16	820	18	2,800	0.16	131
	25	470	20	2,800	0.14	118
	25	560	20	2,800	0.14	140
	35	330	20	2,800	0.12	116
	35	390	20	2,800	0.12	137
	50	150	25	2,000	0.10	75
	63	100	30	2,000	0.08	63