

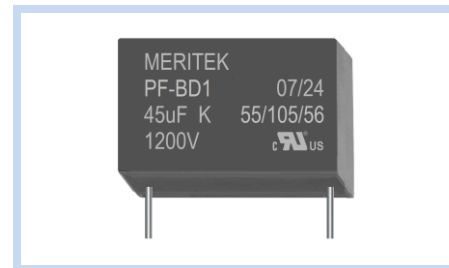
**Power Film Capacitor, DC-Link
THB Grade IIIB 1000Hours
UL 810**

PF-BD1 Series

MERITEK

FEATURE

- Self-Healing Property
- High Ripple and Peak (dv/dt) Current Capability
- Low ESL, High Frequency Performance
- Applications: Renewable Energies Inverters, UPS, Battery Charger, Motor Drive, High Frequency Applications
- THB-IIIB, 85°C, 85% RH, VR, 1000h
- In Accordance with Safety Class of UL 810 Standard



ELECTRICAL CHARACTERISTICS

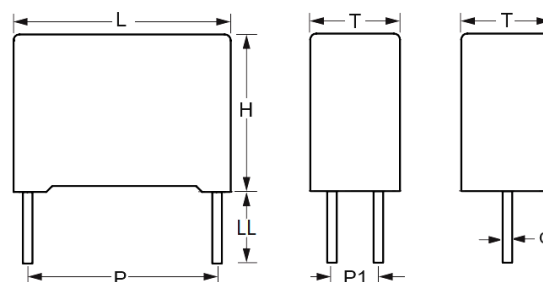
Item	Characteristic									
Operating Temperature	-55~+105°C (85°C~+105°C Decreasing factor 1.25% per °C for rated voltage)									
Capacitance Range	1.0μF ~ 200μF, ±5%(J), ±10%(K), ±20%(M) at 25°C									
Climatic Category	55/105/56 IEC60068-1									
Operating DC Voltage, V _{NDC}	450	550	600	700	800	900	1000	1100	1200	--
Max RMS Current, 70°C 10KHz	5~33	5.5~33	2.9~34	2.9~34	2.9~35	2~33.5	2~28.5	2.2~24.5	3.2~25	--
Dissipation Factor	C ≤20μF		C >20μF		C >80μF		--		at 1KHz; at 25°C	
	≤0.002 (0.2%)		≤0.003 (0.3%)		≤0.004 (0.4%)		--			
Overvoltage	110% of VR		115% of VR		120% of VR		130% of VR		Max duration within one day	
	30% On-Load		30mins		5mins		1min			
Insulation Resistance	IR°C ≥ 30,000sec				Between leads, at 100 Vdc, 60 sec, at 25°C ±5°C°					
Withstanding Voltage	1.5* V _R VDC for 10sec				Between Terminals, at 25°C±5°C					
	3000V _{AC} ; 50/60Hz 60sec				Between Terminals and Enclosure, at 25 ±5°C					
Self-inductance	<1nH				per mm of lead spacing					
Life Expectancy	100,000 hours				at hot spot temperature T _{HS}					

DIMENSIONS

No of Pin	P ±0.5mm	P1 ±0.5mm	d ±0.05mm	L ±1.0mm
2-pin	27.5	NA	0.8	32
2-pin	37.5	NA	1.0	42
4-pin	27.5	10.2	0.8	32
4-pin	37.5	10.2, 20.3	1.0	42
4-pin	52.5	20.3	1.2	57.5

Note:

1. L±1.0mm, H±1mm, T±1mm, See the table below for dimension
2. LL Options: 3mm, 4mm, 5mm, 7mm, 15mm Min



PART NUMBERING SYSTEM

PF 456K 12 540 BD1 5
(1) (2) (3) (4) (5) (6)

No	Item	Code	Description	
(1)	Product Code	PF	Power Film Capacitor, Metallized PP Film	
(2)	Nominal Capacitance	456K	45 μF ±10%(K)	First two digits: Significant, Third: Multiplier
(3)	Rated DC Voltage Code	12	12: 1200VDC	First two digits of Operating DC Voltage, V _{NDC}
(4)	Internal Code	540	5: 52.5mm pitch, 4: 4 pins, 0: Case Code	See the electrical specification table below
(6)	Series Code	BD1	DC Link Capacitor Series, Box Type, THB-IIIB, 85°C, 85% RH, VR, 1000h UL 810	
(7)	Option Code	5	5: LL 5mm Bulk package	4: LL 4mm, Blank: LL: 15mm min, Bulk package

ELECTRICAL SPECIFICATION – 450VDC (45)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
5	32.0	20.0	11.0	27.5	-	0.8	65	325	975	20.0	25	30.0	5.0	2	PF505%45220BD1x
10	32.0	24.5	15.0	27.5	-	0.8	65	650	1950	11.0	25	27.8	7.0	2	PF106%45220BD1x
15	32.0	33.0	18.0	27.5	-	0.8	65	975	2925	7.0	25	17.7	11.0	2	PF156%45220BD1x
22	32.0	37.0	22.0	27.5	-	0.8	65	1430	4290	5.0	28	24.8	11.0	2	PF226%45220BD1x
25	32.0	37.0	22.0	27.5	-	0.8	65	1625	4875	4.8	28	24.8	12.0	2	PF256%45220BD1x
30	42.0	40.0	20.0	37.5	10.2	1.2	35	1050	3150	7.5	30	12.8	12.5	4	PF306%45340BD1x
35	42.0	37.0	22.0	37.5	10.2	1.2	35	1225	3675	7.0	30	11.8	13.5	4	PF356%45340BD1x
40	42.0	37.0	28.0	37.5	10.2	1.2	35	1400	4200	6.2	30	11.5	14.5	4	PF406%45340BD1x
50	42.0	43.0	28.0	37.5	10.2	1.2	35	1750	5250	5.0	30	11.7	16.0	4	PF506%45341BD1x
50	42.0	45.0	30.0	37.5	20.3	1.2	35	1750	5250	5.0	30	11.7	16.0	4	PF506%45342BD1x
60	42.0	45.0	30.0	37.5	20.3	1.2	35	2100	6300	4.5	30	12.2	16.5	4	PF606%45340BD1x
80	42.0	50.0	35.0	37.5	20.3	1.2	35	2800	8400	3.8	30	12.2	20.5	4	PF806%45340BD1x
110	42.0	60.0	45.0	37.5	20.3	1.2	35	3850	11550	3.6	30	12.2	24.5	4	PF117%45340BD1x
130	42.0	60.0	45.0	37.5	20.3	1.2	35	4550	13650	3.0	30	12.2	28.5	4	PF137%45340BD1x
75	57.5	45.0	30.0	52.5	20.3	1.2	20	1500	4500	5.5	35	10.0	16.5	4	PF756%45540BD1x
80	57.5	45.0	30.0	52.5	20.3	1.2	20	1600	4800	5.0	35	10.4	17.0	4	PF806%45540BD1x
100	57.5	50.0	35.0	52.5	20.3	1.2	20	2000	6000	4.5	35	10.3	18.0	4	PF107%45540BD1x
110	57.5	50.0	35.0	52.5	20.3	1.2	20	2200	6600	4.0	35	10.4	19.0	4	PF117%45540BD1x
120	57.5	50.0	35.0	52.5	20.3	1.2	20	2400	7200	3.8	35	10.4	21.5	4	PF127%45540BD1x
160	57.5	55.0	45.0	52.5	20.3	1.2	20	3200	9600	3.0	35	10.4	28.5	4	PF167%45540BD1x
200	57.5	65.0	45.0	52.5	20.3	1.2	20	4000	12000	2.6	35	10.4	33.0	4	PF207%45540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 550VDC (55)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
5	32.0	22.0	13.0	27.5	-	0.8	65	325	975	19.5	25	25.4	5.5	2	PF505%55220BD1x
10	32.0	33.0	18.0	27.5	-	0.8	65	650	1950	10.5	25	25.4	7.5	2	PF106%55220BD1x
15	32.0	37.0	22.0	27.5	-	0.8	65	975	2925	6.8	28	16.7	11.5	2	PF156%55220BD1x
22	32.0	37.0	22.0	27.5	-	0.8	65	1430	4290	4.9	28	23.1	11.5	2	PF226%55220BD1x
30	42.0	44.0	24.0	37.5	10.2	1.2	35	1050	3150	7.2	30	12.3	13.0	4	PF306%55340BD1x
35	42.0	45.0	30.0	37.5	20.3	1.2	35	1225	3675	6.8	30	11.6	13.8	4	PF356%55340BD1x
40	42.0	45.0	30.0	37.5	20.3	1.2	35	1400	4200	6.0	30	11.4	14.8	4	PF406%55340BD1x
50	42.0	50.0	35.0	37.5	20.3	1.2	35	1750	5250	4.8	30	10.8	17.0	4	PF506%55340BD1x
60	42.0	50.0	35.0	37.5	20.3	1.2	35	2100	6300	4.2	30	11.0	18.0	4	PF606%55340BD1x
70	42.0	50.0	35.0	37.5	20.3	1.2	35	2450	7350	3.8	30	11.0	20.5	4	PF706%55340BD1x
110	42.0	60.0	45.0	37.5	20.3	1.2	35	3850	11550	3.6	30	11.0	24.5	4	PF117%55340BD1x
75	57.5	45.0	30.0	52.5	20.3	1.2	20	1500	4500	5.2	35	10.2	16.8	4	PF756%55540BD1x
100	57.5	50.0	35.0	52.5	20.3	1.2	20	2000	6000	4.3	35	10.2	18.5	4	PF107%55540BD1x
110	57.5	50.0	35.0	52.5	20.3	1.2	20	2200	6600	4.0	35	9.4	20.0	4	PF117%55540BD1x
140	57.5	55.0	45.0	52.5	20.3	1.2	20	2800	8400	3.5	35	6.3	26.0	4	PF147%55540BD1x
170	57.5	65.0	45.0	52.5	20.3	1.2	20	3400	10200	2.8	35	5.2	32.0	4	PF177%55540BD1x
180	57.5	65.0	45.0	52.5	20.3	1.2	20	3600	10800	2.6	35	5.2	33.0	4	PF187%55540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 600VDC(60)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
2	32.0	18.0	9.0	27.5	-	0.8	65	130	390	40.0	25	44.6	2.9	2	PF205%60220BD1x
3	32.0	20.0	11.0	27.5	-	0.8	65	195	585	28.0	25	33.5	4.0	2	PF305%60220BD1x
4	32.0	20.0	11.0	27.5	-	0.8	65	260	780	23.0	25	21.6	5.5	2	PF405%60220BD1x
5	32.0	22.0	13.0	27.5	-	0.8	65	325	975	14.5	25	21.1	7.0	2	PF505%60220BD1x
6	32.0	24.5	15.0	27.5	-	0.8	65	390	1170	13.0	25	21.7	7.3	2	PF605%60220BD1x
7	32.0	24.5	15.0	27.5	-	0.8	65	455	1365	12.0	25	17.3	8.5	2	PF705%60220BD1x
8	32.0	28.0	14.0	27.5	-	0.8	65	520	1560	11.0	25	15.1	9.5	2	PF805%60220BD1x
9	32.0	30.0	16.0	27.5	-	0.8	65	585	1755	10.5	25	13.0	10.5	2	PF905%60220BD1x
10	32.0	30.0	16.0	27.5	-	0.8	65	650	1950	10.0	25	12.4	11.0	2	PF106%60220BD1x
12	32.0	33.0	18.0	27.5	-	0.8	65	780	2340	9.5	25	11.0	12.0	2	PF126%60220BD1x
15	32.0	37.0	22.0	27.5	-	0.8	65	975	2925	9.5	28	11.0	12.0	2	PF156%60221BD1x
15	32.0	37.0	22.0	27.5	10.2	1.0	65	975	2925	7.0	28	10.2	14.5	4	PF156%60242BD1x
18	32.0	37.0	22.0	27.5	-	0.8	65	1170	3510	9.0	28	10.7	12.5	2	PF186%60221BD1x
18	32.0	37.0	22.0	27.5	10.2	1.0	65	1170	3510	6.0	28	9.2	16.5	4	PF186%60242BD1x
10	42.0	30.0	17.0	37.5	-	1.0	35	350	1050	18.0	28	17.0	7.0	2	PF106%60320BD1x
12	42.0	30.0	17.0	37.5	-	1.0	35	420	1260	12.0	28	19.5	8.0	2	PF126%60320BD1x
15	42.0	32.0	19.0	37.5	-	1.0	35	525	1575	11.0	28	15.1	9.5	2	PF156%60320BD1x
20	42.0	40.0	20.0	37.5	10.2	1.2	35	700	2100	9.0	30	10.7	12.5	4	PF206%60340BD1x
22	42.0	40.0	20.0	37.5	10.2	1.2	35	770	2310	8.0	30	10.3	13.5	4	PF226%60340BD1x
25	42.0	40.0	20.0	37.5	10.2	1.2	35	875	2625	7.0	30	8.9	15.5	4	PF256%60340BD1x
30	42.0	44.0	24.0	37.5	10.2	1.2	35	1050	3150	6.5	30	8.5	16.5	4	PF306%60340BD1x
35	42.0	45.0	30.0	37.5	20.3	1.2	35	1225	3675	6.0	30	7.3	18.5	4	PF356%60340BD1x
40	42.0	45.0	30.0	37.5	20.3	1.2	35	1400	4200	5.0	30	7.1	20.5	4	PF406%60340BD1x
45	42.0	50.0	35.0	37.5	20.3	1.2	35	1575	4725	4.5	30	6.3	23.0	4	PF456%60340BD1x
50	42.0	50.0	35.0	37.5	20.3	1.2	35	1750	5250	4.0	30	6.0	25.0	4	PF506%60340BD1x
60	42.0	55.0	40.0	37.5	20.3	1.2	35	2100	6300	3.8	30	5.4	27.0	4	PF606%60340BD1x
70	42.0	55.0	40.0	37.5	20.3	1.2	35	2450	7350	3.5	30	5.1	29.0	4	PF706%60340BD1x
75	42.0	60.0	45.0	37.5	20.3	1.2	35	2625	7875	3.0	30	5.6	30.0	4	PF756%60340BD1x
80	42.0	60.0	45.0	37.5	20.3	1.2	35	2800	8400	2.8	30	5.2	32.0	4	PF806%60340BD1x
85	42.0	60.0	45.0	37.5	20.3	1.2	35	2975	8925	2.5	30	5.2	34.0	4	PF856%60340BD1x
40	57.5	45.0	25.0	52.5	10.2	1.2	20	800	2400	8.0	35	10.3	13.5	4	PF406%60540BD1x
45	57.5	45.0	25.0	52.5	10.2	1.2	20	900	2700	7.5	35	10.2	14.0	4	PF456%60540BD1x
50	57.5	45.0	25.0	52.5	10.2	1.2	20	1000	3000	7.0	35	8.9	15.5	4	PF506%60540BD1x
55	57.5	45.0	30.0	52.5	20.3	1.2	20	1100	3300	6.2	35	8.4	17.0	4	PF556%60540BD1x
60	57.5	45.0	30.0	52.5	20.3	1.2	20	1200	3600	6.0	35	7.3	18.5	4	PF606%60540BD1x
65	57.5	50.0	35.0	52.5	20.3	1.2	20	1300	3900	5.5	35	6.8	20.0	4	PF656%60540BD1x
70	57.5	50.0	35.0	52.5	20.3	1.2	20	1400	4200	5.0	35	6.5	21.5	4	PF706%60540BD1x
75	57.5	50.0	35.0	52.5	20.3	1.2	20	1500	4500	4.5	35	6.0	23.5	4	PF756%60540BD1x
80	57.5	50.0	35.0	52.5	20.3	1.2	20	1600	4800	4.2	35	5.9	24.5	4	PF806%60540BD1x
90	57.5	55.0	45.0	52.5	20.3	1.2	20	1800	5400	4.0	35	5.5	26.0	4	PF906%60540BD1x
100	57.5	55.0	45.0	52.5	20.3	1.2	20	2000	6000	3.4	35	5.2	29.0	4	PF107%60540BD1x
110	57.5	55.0	45.0	52.5	20.3	1.2	20	2200	6600	3.0	35	5.6	30.0	4	PF117%60540BD1x
120	57.5	65.0	45.0	52.5	20.3	1.2	20	2400	7200	2.8	35	5.2	32.0	4	PF127%60540BD1x
130	57.5	65.0	45.0	52.5	20.3	1.2	20	2600	7800	2.6	35	5.3	33.0	4	PF137%60540BD1x
140	57.5	65.0	45.0	52.5	20.3	1.2	20	2800	8400	2.5	35	5.2	34.0	4	PF147%60540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 700VDC (70)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
2	32.0	18.0	9.0	27.5	-	0.8	65	130	390	40.0	25	44.6	2.9	2	PF205%70220BD1x
3	32.0	20.0	11.0	27.5	-	0.8	65	195	585	28.0	25	33.5	4.0	2	PF305%70220BD1x
4	32.0	20.0	11.0	27.5	-	0.8	65	260	780	23.0	25	21.6	5.5	2	PF405%70220BD1x
5	32.0	22.0	13.0	27.5	-	0.8	65	325	975	14.5	25	21.1	7.0	2	PF505%70220BD1x
6	32.0	24.5	15.0	27.5	-	0.8	65	390	1170	13.0	25	21.7	7.3	2	PF605%70220BD1x
7	32.0	24.5	15.0	27.5	-	0.8	65	455	1365	12.0	25	17.3	8.5	2	PF705%70220BD1x
8	32.0	28.0	14.0	27.5	-	0.8	65	520	1560	11.0	25	15.1	9.5	2	PF805%70220BD1x
9	32.0	30.0	16.0	27.5	-	0.8	65	585	1755	10.5	25	13.0	10.5	2	PF905%70220BD1x
10	32.0	30.0	16.0	27.5	-	0.8	65	650	1950	10.0	25	12.4	11.0	2	PF106%70220BD1x
12	32.0	33.0	18.0	27.5	-	0.8	65	780	2340	9.5	25	11.0	12.0	2	PF126%70220BD1x
15	32.0	37.0	22.0	27.5	-	0.8	65	975	2925	9.5	28	11.0	12.0	2	PF156%70221BD1x
15	32.0	37.0	22.0	27.5	10.2	1.0	65	975	2925	7.0	28	10.2	14.5	4	PF156%70242BD1x
18	32.0	37.0	22.0	27.5	-	0.8	65	1170	3510	9.0	28	10.7	12.5	2	PF186%70221BD1x
18	32.0	37.0	22.0	27.5	10.2	1.0	65	1170	3510	6.0	28	9.2	16.5	4	PF186%70242BD1x
10	42.0	30.0	17.0	37.5	-	1.0	35	350	1050	18.0	28	17.0	7.0	2	PF106%70320BD1x
12	42.0	30.0	17.0	37.5	-	1.0	35	420	1260	12.0	28	19.5	8.0	2	PF126%70320BD1x
15	42.0	32.0	19.0	37.5	-	1.0	35	525	1575	11.0	28	15.1	9.5	2	PF156%70320BD1x
20	42.0	40.0	20.0	37.5	10.2	1.2	35	700	2100	9.0	30	10.7	12.5	4	PF206%70340BD1x
22	42.0	40.0	20.0	37.5	10.2	1.2	35	770	2310	8.0	30	10.3	13.5	4	PF226%70340BD1x
25	42.0	40.0	20.0	37.5	10.2	1.2	35	875	2625	7.0	30	8.9	15.5	4	PF256%70340BD1x
30	42.0	44.0	24.0	37.5	10.2	1.2	35	1050	3150	6.5	30	8.5	16.5	4	PF306%70340BD1x
35	42.0	45.0	30.0	37.5	20.3	1.2	35	1225	3675	6.0	30	7.3	18.5	4	PF356%70340BD1x
40	42.0	45.0	30.0	37.5	20.3	1.2	35	1400	4200	5.0	30	7.1	20.5	4	PF406%70340BD1x
45	42.0	50.0	35.0	37.5	20.3	1.2	35	1575	4725	4.5	30	6.3	23.0	4	PF456%70340BD1x
50	42.0	50.0	35.0	37.5	20.3	1.2	35	1750	5250	4.0	30	6.0	25.0	4	PF506%70340BD1x
60	42.0	55.0	40.0	37.5	20.3	1.2	35	2100	6300	3.8	30	5.4	27.0	4	PF606%70340BD1x
70	42.0	55.0	40.0	37.5	20.3	1.2	35	2450	7350	3.5	30	5.1	29.0	4	PF706%70340BD1x
75	42.0	60.0	45.0	37.5	20.3	1.2	35	2625	7875	3.0	30	5.6	30.0	4	PF756%70340BD1x
80	42.0	60.0	45.0	37.5	20.3	1.2	35	2800	8400	2.8	30	5.2	32.0	4	PF806%70340BD1x
85	42.0	60.0	45.0	37.5	20.3	1.2	35	2975	8925	2.5	30	5.2	34.0	4	PF856%70340BD1x
40	57.5	45.0	25.0	52.5	10.2	1.2	20	800	2400	8.0	35	10.3	13.5	4	PF406%70540BD1x
45	57.5	45.0	25.0	52.5	10.2	1.2	20	900	2700	7.5	35	10.2	14.0	4	PF456%70540BD1x
50	57.5	45.0	25.0	52.5	10.2	1.2	20	1000	3000	7.0	35	8.9	15.5	4	PF506%70540BD1x
55	57.5	45.0	30.0	52.5	20.3	1.2	20	1100	3300	6.2	35	8.4	17.0	4	PF556%70540BD1x
60	57.5	45.0	30.0	52.5	20.3	1.2	20	1200	3600	6.0	35	7.3	18.5	4	PF606%70540BD1x
65	57.5	50.0	35.0	52.5	20.3	1.2	20	1300	3900	5.5	35	6.8	20.0	4	PF656%70540BD1x
70	57.5	50.0	35.0	52.5	20.3	1.2	20	1400	4200	5.0	35	6.5	21.5	4	PF706%70540BD1x
75	57.5	50.0	35.0	52.5	20.3	1.2	20	1500	4500	4.5	35	6.0	23.5	4	PF756%70540BD1x
80	57.5	50.0	35.0	52.5	20.3	1.2	20	1600	4800	4.2	35	5.9	24.5	4	PF806%70540BD1x
90	57.5	55.0	45.0	52.5	20.3	1.2	20	1800	5400	4.0	35	5.5	26.0	4	PF906%70540BD1x
100	57.5	55.0	45.0	52.5	20.3	1.2	20	2000	6000	3.4	35	5.2	29.0	4	PF107%70540BD1x
110	57.5	55.0	45.0	52.5	20.3	1.2	20	2200	6600	3.0	35	5.6	30.0	4	PF117%70540BD1x
120	57.5	65.0	45.0	52.5	20.3	1.2	20	2400	7200	2.8	35	5.2	32.0	4	PF127%70540BD1x
130	57.5	65.0	45.0	52.5	20.3	1.2	20	2600	7800	2.6	35	5.3	33.0	4	PF137%70540BD1x
140	57.5	65.0	45.0	52.5	20.3	1.2	20	2800	8400	2.5	35	5.2	34.0	4	PF147%70540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 800VDC (80)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
2	32.0	18.0	9.0	27.5	-	0.8	65	130	390	40.0	25	44.6	2.9	2	PF205%80220BD1x
3	32.0	20.0	11.0	27.5	-	0.8	65	195	585	26.0	25	28.5	4.5	2	PF305%80220BD1x
4	32.0	24.5	13.0	27.5	-	0.8	65	260	780	22.0	25	20.3	5.8	2	PF405%80220BD1x
5	32.0	24.5	15.0	27.5	-	0.8	65	325	975	14.0	25	19.0	7.5	2	PF505%80220BD1x
6	32.0	30.0	16.0	27.5	-	0.8	65	390	1170	12.0	25	17.3	8.5	2	PF605%80220BD1x
7	32.0	30.0	16.0	27.5	-	0.8	65	455	1365	11.0	25	15.1	9.5	2	PF705%80220BD1x
8	32.0	33.0	18.0	27.5	-	0.8	65	520	1560	10.5	25	13.0	10.5	2	PF805%80220BD1x
9	32.0	33.0	18.0	27.5	-	0.8	65	585	1755	10.2	25	11.1	11.5	2	PF905%80220BD1x
10	32.0	37.0	22.0	27.5	-	0.8	65	650	1950	9.5	25	11.0	12.0	2	PF106%80221BD1x
10	32.0	37.0	22.0	27.5	10.2	1.0	65	650	1950	8.5	25	9.0	14.0	4	PF106%80242BD1x
12	32.0	37.0	22.0	27.5	-	0.8	65	780	2340	9.5	25	11.0	12.0	2	PF126%80221BD1x
12	32.0	37.0	22.0	27.5	10.2	1.0	65	780	2340	8.0	25	8.3	15.0	4	PF126%80242BD1x
14	32.0	37.0	22.0	27.5	-	0.8	65	910	2730	9.5	25	11.0	12.0	2	PF146%80221BD1x
14	32.0	37.0	22.0	27.5	10.2	1.0	65	910	2730	7.5	25	7.8	16.0	4	PF146%80242BD1x
8	42.0	30.0	17.0	37.5	-	1.0	35	280	840	22.5	28	22.0	5.5	2	PF805%80320BD1x
9	42.0	30.0	17.0	37.5	-	1.0	35	315	945	21.5	28	19.4	6.0	2	PF905%80320BD1x
10	42.0	32.0	19.0	37.5	-	1.0	35	350	1050	18.0	28	17.0	7.0	2	PF106%80320BD1x
12	42.0	32.0	19.0	37.5	-	1.0	35	420	1260	12.0	28	19.5	8.0	2	PF126%80320BD1x
14	42.0	32.0	19.0	37.5	-	1.0	35	490	1470	11.0	28	15.1	9.5	2	PF146%80320BD1x
15	42.0	40.0	20.0	37.5	10.2	1.2	35	525	1575	9.0	30	10.7	12.5	4	PF156%80340BD1x
20	42.0	44.0	24.0	37.5	10.2	1.2	35	700	2100	8.0	30	10.3	13.5	4	PF206%80340BD1x
25	42.0	44.0	24.0	37.5	10.2	1.2	35	875	2625	6.5	30	8.5	16.5	4	PF256%80340BD1x
30	42.0	45.0	30.0	37.5	20.3	1.2	35	1050	3150	5.8	30	6.5	20.0	4	PF306%80340BD1x
35	42.0	50.0	35.0	37.5	20.3	1.2	35	1225	3675	5.5	30	5.6	22.0	4	PF356%80340BD1x
40	42.0	50.0	35.0	37.5	20.3	1.2	35	1400	4200	4.8	30	5.0	25.0	4	PF406%80340BD1x
45	42.0	55.0	40.0	37.5	20.3	1.2	35	1575	4725	4.0	30	4.8	28.0	4	PF456%80340BD1x
50	42.0	55.0	40.0	37.5	20.3	1.2	35	1750	5250	3.6	30	4.3	31.0	4	PF506%80340BD1x
55	42.0	60.0	45.0	37.5	20.3	1.2	35	1925	5775	3.4	30	4.2	32.5	4	PF556%80340BD1x
60	42.0	60.0	45.0	37.5	20.3	1.2	35	2100	6300	3.2	30	4.1	34.0	4	PF606%80340BD1x
65	42.0	60.0	45.0	37.5	20.3	1.2	35	2275	6825	2.8	30	4.4	35.0	4	PF656%80340BD1x
25	57.5	45.0	25.0	52.5	10.2	1.2	20	500	1500	12.0	35	17.3	8.5	4	PF256%80540BD1x
30	57.5	45.0	25.0	52.5	10.2	1.2	20	600	1800	10.5	35	14.3	10.0	4	PF306%80540BD1x
35	57.5	45.0	25.0	52.5	10.2	1.2	20	700	2100	9.5	35	11.0	12.0	4	PF356%80540BD1x
40	57.5	45.0	30.0	52.5	20.3	1.2	20	800	2400	8.5	35	9.0	14.0	4	PF406%80540BD1x
45	57.5	45.0	30.0	52.5	20.3	1.2	20	900	2700	7.0	35	8.9	15.5	4	PF456%80540BD1x
50	57.5	50.0	35.0	52.5	20.3	1.2	20	1000	3000	5.8	35	8.9	17.0	4	PF506%80540BD1x
55	57.5	50.0	35.0	52.5	20.3	1.2	20	1100	3300	5.5	35	7.6	19.0	4	PF556%80540BD1x
60	57.5	50.0	35.0	52.5	20.3	1.2	20	1200	3600	4.8	35	7.1	21.0	4	PF606%80540BD1x
65	57.5	55.0	45.0	52.5	20.3	1.2	20	1300	3900	4.6	35	6.4	22.5	4	PF656%80540BD1x
70	57.5	55.0	45.0	52.5	20.3	1.2	20	1400	4200	4.5	35	5.8	24.0	4	PF706%80540BD1x
75	57.5	55.0	45.0	52.5	20.3	1.2	20	1500	4500	4.3	35	5.4	25.5	4	PF756%80540BD1x
80	57.5	55.0	45.0	52.5	20.3	1.2	20	1600	4800	4.2	35	5.3	26.0	4	PF806%80540BD1x
90	57.5	55.0	45.0	52.5	20.3	1.2	20	1800	5400	4.0	35	5.0	27.5	4	PF906%80540BD1x
100	57.5	65.0	45.0	52.5	20.3	1.2	20	2000	6000	3.2	35	4.7	31.5	4	PF107%80540BD1x
110	57.5	65.0	45.0	52.5	20.3	1.2	20	2200	6600	3.0	35	4.3	34.0	4	PF117%80540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 900VDC (90)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
1	32.0	18.0	9.0	27.5	-	0.8	70	70	210	65.0	25	57.7	2.0	2	PF105%90220BD1x
2	32.0	20.0	11.0	27.5	-	0.8	70	140	420	38.0	25	38.5	3.2	2	PF205%90220BD1x
3	32.0	22.0	13.0	27.5	-	0.8	70	210	630	30.0	25	21.7	4.8	2	PF305%90220BD1x
4	32.0	24.5	15.0	27.5	-	0.8	70	280	840	20.5	25	20.3	6.0	2	PF405%90220BD1x
5	32.0	30.0	16.0	27.5	-	0.8	70	350	1050	12.0	25	22.2	7.5	2	PF505%90220BD1x
6	32.0	33.0	18.0	27.5	-	0.8	70	420	1260	11.5	25	21.4	7.8	2	PF605%90220BD1x
7	32.0	33.0	18.0	27.5	-	0.8	70	490	1470	10.2	25	13.3	10.5	2	PF705%90220BD1x
8	32.0	37.0	22.0	27.5	-	0.8	70	560	1680	9.5	25	11.9	11.5	2	PF805%90221BD1x
8	32.0	37.0	22.0	27.5	10.2	1.0	70	560	1680	9.0	25	10.7	12.5	4	PF805%90242BD1x
9	32.0	37.0	22.0	27.5	-	0.8	70	630	1890	9.7	25	11.1	11.8	2	PF905%90221BD1x
9	32.0	37.0	22.0	27.5	10.2	1.0	70	630	1890	7.8	25	9.8	14.0	4	PF905%90242BD1x
10	32.0	37.0	22.0	27.5	-	0.8	70	700	2100	9.5	25	11.0	12.0	2	PF106%90221BD1x
10	32.0	37.0	22.0	27.5	10.2	1.0	70	700	2100	7.2	25	8.7	15.5	4	PF106%90242BD1x
5	42.0	30.0	17.0	37.5	-	1.0	35	175	525	28.0	28	37.1	3.8	2	PF505%90320BD1x
6	42.0	30.0	17.0	37.5	-	1.0	35	210	630	25.0	28	29.6	4.5	2	PF605%90320BD1x
7	42.0	30.0	17.0	37.5	-	1.0	35	245	735	22.0	28	27.3	5.0	2	PF705%90320BD1x
8	42.0	32.0	19.0	37.5	-	1.0	35	280	840	19.5	28	21.4	6.0	2	PF805%90320BD1x
10	42.0	40.0	20.0	37.5	10.2	1.2	35	350	1050	13.0	30	20.5	7.5	4	PF106%90340BD1x
12	42.0	37.0	22.0	37.5	10.2	1.2	35	420	1260	11.5	30	16.1	9.0	4	PF126%90340BD1x
15	42.0	44.0	24.0	37.5	10.2	1.2	35	525	1575	10.5	30	13.0	10.5	4	PF156%90340BD1x
18	42.0	44.0	24.0	37.5	10.2	1.2	35	630	1890	8.8	30	10.1	13.0	4	PF186%90340BD1x
20	42.0	44.0	24.0	37.5	10.2	1.2	35	700	2100	7.5	30	9.5	14.5	4	PF206%90340BD1x
25	42.0	45.0	30.0	37.5	20.3	1.2	35	875	2625	6.2	30	7.9	17.5	4	PF256%90340BD1x
30	42.0	50.0	35.0	37.5	20.3	1.2	35	1050	3150	5.0	30	6.5	21.5	4	PF306%90340BD1x
35	42.0	55.0	40.0	37.5	20.3	1.2	35	1225	3675	4.6	30	6.2	23.0	4	PF356%90340BD1x
40	42.0	55.0	40.0	37.5	20.3	1.2	35	1400	4200	3.9	30	5.5	26.5	4	PF406%90340BD1x
45	42.0	60.0	45.0	37.5	20.3	1.2	35	1575	4725	3.4	30	4.9	30.0	4	PF456%90340BD1x
50	42.0	60.0	45.0	37.5	20.3	1.2	35	1750	5250	3.0	30	4.5	33.5	4	PF506%90340BD1x
15	57.5	45.0	25.0	52.5	10.2	1.2	20	300	900	22.0	35	22.5	5.5	4	PF156%90540BD1x
20	57.5	45.0	25.0	52.5	10.2	1.2	20	400	1200	13.5	35	19.8	7.5	4	PF206%90540BD1x
25	57.5	45.0	25.0	52.5	10.2	1.2	20	500	1500	11.5	35	16.1	9.0	4	PF256%90540BD1x
30	57.5	45.0	30.0	52.5	20.3	1.2	20	600	1800	10.0	35	12.4	11.0	4	PF306%90540BD1x
35	57.5	45.0	30.0	52.5	20.3	1.2	20	700	2100	9.0	35	10.7	12.5	4	PF356%90540BD1x
40	57.5	50.0	35.0	52.5	20.3	1.2	20	800	2400	7.5	35	9.5	14.5	4	PF406%90540BD1x
45	57.5	50.0	35.0	52.5	20.3	1.2	20	900	2700	6.8	35	8.6	16.0	4	PF456%90540BD1x
50	57.5	50.0	35.0	52.5	20.3	1.2	20	1000	3000	6.4	35	7.2	18.0	4	PF506%90540BD1x
55	57.5	55.0	45.0	52.5	20.3	1.2	20	1100	3300	5.6	35	6.7	20.0	4	PF556%90540BD1x
60	57.5	55.0	45.0	52.5	20.3	1.2	20	1200	3600	4.8	35	6.8	21.5	4	PF606%90540BD1x
65	57.5	55.0	45.0	52.5	20.3	1.2	20	1300	3900	4.5	35	6.3	23.0	4	PF656%90540BD1x
70	57.5	65.0	45.0	52.5	20.3	1.2	20	1400	4200	4.0	35	6.0	25.0	4	PF706%90540BD1x
75	57.5	65.0	45.0	52.5	20.3	1.2	20	1500	4500	3.9	35	5.9	25.5	4	PF756%90540BD1x
80	57.5	65.0	45.0	52.5	20.3	1.2	20	1600	4800	3.8	35	5.6	26.5	4	PF806%90540BD1x
85	57.5	65.0	45.0	52.5	20.3	1.2	20	1700	5100	3.6	35	5.1	28.5	4	PF856%90540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 1000VDC (10)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
1	32.0	18.0	9.0	27.5	-	0.8	75	75	225	65.0	25	57.7	2.0	2	PF105%10220BD1x
2	32.0	22.0	13.0	27.5	-	0.8	75	150	450	38.0	25	32.2	3.5	2	PF205%10220BD1x
3	32.0	24.5	15.0	27.5	-	0.8	75	225	675	22.0	25	27.3	5.0	2	PF305%10220BD1x
4	32.0	30.0	16.0	27.5	-	0.8	75	300	900	16.5	25	18.6	7.0	2	PF405%10220BD1x
5	32.0	33.0	18.0	27.5	-	0.8	75	375	1125	12.5	25	16.6	8.5	2	PF505%10220BD1x
6	32.0	33.0	18.0	27.5	-	0.8	75	450	1350	11.5	25	16.1	9.0	2	PF605%10220BD1x
7	32.0	37.0	22.0	27.5	-	0.8	75	525	1575	11.0	25	15.1	9.5	2	PF705%10221BD1x
7	32.0	37.0	22.0	27.5	10.2	1.0	75	525	1575	9.8	25	11.6	11.5	4	PF705%10242BD1x
8	32.0	37.0	22.0	27.5	-	0.8	75	600	1800	10.5	25	13.0	10.5	2	PF805%10221BD1x
8	32.0	37.0	22.0	27.5	10.2	1.0	75	600	1800	8.8	25	10.1	13.0	4	PF805%10242BD1x
5	42.0	30.0	17.0	37.5	-	1.0	35	175	525	28.0	28	37.1	3.8	2	PF505%10320BD1x
6	42.0	30.0	17.0	37.5	-	1.0	35	210	630	25.0	28	29.6	4.5	2	PF605%10320BD1x
7	42.0	30.0	17.0	37.5	-	1.0	35	245	735	22.0	28	27.3	5.0	2	PF705%10320BD1x
8	42.0	32.0	19.0	37.5	-	1.0	35	280	840	19.5	28	21.4	6.0	2	PF805%10320BD1x
10	42.0	40.0	20.0	37.5	10.2	1.2	35	350	1050	13.0	30	20.5	7.5	4	PF106%10340BD1x
12	42.0	37.0	22.0	37.5	10.2	1.2	35	420	1260	11.5	30	16.1	9.0	4	PF126%10340BD1x
15	42.0	44.0	24.0	37.5	10.2	1.2	35	525	1575	10.0	30	11.3	11.5	4	PF156%10340BD1x
18	42.0	45.0	30.0	37.5	20.3	1.2	35	630	1890	7.8	30	9.8	14.0	4	PF186%10340BD1x
20	42.0	45.0	30.0	37.5	20.3	1.2	35	700	2100	7.0	30	8.9	15.5	4	PF206%10340BD1x
25	42.0	50.0	35.0	37.5	20.3	1.2	35	875	2625	5.5	30	7.2	19.5	4	PF256%10340BD1x
30	42.0	55.0	40.0	37.5	20.3	1.2	35	1050	3150	4.6	30	6.2	23.0	4	PF306%10340BD1x
35	42.0	55.0	40.0	37.5	20.3	1.2	35	1225	3675	4.0	30	6.0	25.0	4	PF356%10340BD1x
40	42.0	60.0	45.0	37.5	20.3	1.2	35	1400	4200	3.6	30	5.1	28.5	4	PF406%10340BD1x
15	57.5	45.0	25.0	52.5	10.2	1.2	20	300	900	19.8	35	22.5	5.8	4	PF156%10540BD1x
20	57.5	45.0	25.0	52.5	10.2	1.2	20	400	1200	13.5	35	19.8	7.5	4	PF206%10540BD1x
25	57.5	45.0	25.0	52.5	10.2	1.2	20	500	1500	11.0	35	15.1	9.5	4	PF256%10540BD1x
30	57.5	45.0	30.0	52.5	20.3	1.2	20	600	1800	9.8	35	11.6	11.5	4	PF306%10540BD1x
35	57.5	45.0	30.0	52.5	20.3	1.2	20	700	2100	8.0	35	10.3	13.5	4	PF356%10540BD1x
40	57.5	50.0	35.0	52.5	20.3	1.2	20	800	2400	7.0	35	8.9	15.5	4	PF406%10540BD1x
45	57.5	55.0	45.0	52.5	20.3	1.2	20	900	2700	6.2	35	7.9	17.5	4	PF456%10540BD1x
50	57.5	55.0	45.0	52.5	20.3	1.2	20	1000	3000	5.8	35	6.8	19.5	4	PF506%10540BD1x
55	57.5	55.0	45.0	52.5	20.3	1.2	20	1100	3300	5.0	35	6.8	21.0	4	PF556%10540BD1x
60	57.5	65.0	45.0	52.5	20.3	1.2	20	1200	3600	4.6	35	6.2	23.0	4	PF606%10540BD1x
65	57.5	65.0	45.0	52.5	20.3	1.2	20	1300	3900	4.2	35	5.7	25.0	4	PF656%10540BD1x
70	57.5	65.0	45.0	52.5	20.3	1.2	20	1400	4200	3.8	35	5.4	27.0	4	PF706%10540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 1100VDC (11)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
1	32.0	20.0	11.0	27.5	-	0.8	80	80	240	65.0	25	47.7	2.2	2	PF105%11220BD1x
1.5	32.0	22.0	13.0	27.5	-	0.8	80	120	360	46.0	25	52.2	2.5	2	PF155%11220BD1x
2	32.0	24.5	13.0	27.5	-	0.8	80	160	480	24.5	25	26.6	4.8	2	PF205%11220BD1x
3	32.0	30.0	16.0	27.5	-	0.8	80	240	720	18.5	25	19.2	6.5	2	PF305%11220BD1x
4	32.0	33.0	18.0	27.5	-	0.8	80	320	960	12.5	25	16.6	8.5	2	PF405%11220BD1x
5	32.0	37.0	22.0	27.5	-	0.8	80	400	1200	10.8	25	14.5	9.8	2	PF505%11221BD1x
5	32.0	37.0	22.0	27.5	10.2	1.0	80	400	1200	10.5	25	13.0	10.5	4	PF505%11242BD1x
6	32.0	37.0	22.0	27.5	-	0.8	80	480	1440	10.5	25	13.0	10.5	2	PF605%11221BD1x
6	32.0	37.0	22.0	27.5	10.2	1.0	80	480	1440	8.8	25	10.1	13.0	4	PF605%11242BD1x
3	42.0	30.0	17.0	37.5	-	1.0	40	120	360	46.0	28	52.2	2.5	2	PF305%11320BD1x
4	42.0	30.0	17.0	37.5	-	1.0	40	160	480	32.5	28	37.7	3.5	2	PF405%11320BD1x
4.7	42.0	32.0	19.0	37.5	-	1.0	40	188	564	28.0	28	33.5	4.0	2	PF475%11320BD1x
5	42.0	32.0	19.0	37.5	-	1.0	40	200	600	26.0	28	32.7	4.2	2	PF505%11320BD1x
6	42.0	32.0	19.0	37.5	-	1.0	40	240	720	23.5	28	25.5	5.0	2	PF605%11320BD1x
7	42.0	40.0	20.0	37.5	10.2	1.2	40	280	840	18.5	30	22.5	6.0	4	PF705%11340BD1x
8	42.0	37.0	22.0	37.5	10.2	1.2	40	320	960	16.5	30	21.5	6.5	4	PF805%11340BD1x
9	42.0	37.0	22.0	37.5	10.2	1.2	40	360	1080	13.0	30	20.5	7.5	4	PF905%11340BD1x
10	42.0	44.0	24.0	37.5	10.2	1.2	40	400	1200	12.0	30	17.3	8.5	4	PF106%11340BD1x
12	42.0	44.0	24.0	37.5	10.2	1.2	40	480	1440	10.8	30	13.9	10.0	4	PF126%11340BD1x
14	42.0	45.0	30.0	37.5	20.3	1.2	40	560	1680	9.5	30	11.0	12.0	4	PF146%11340BD1x
15	42.0	45.0	30.0	37.5	20.3	1.2	40	600	1800	8.5	30	10.4	13.0	4	PF156%11340BD1x
18	42.0	50.0	35.0	37.5	20.3	1.2	40	720	2160	7.0	30	9.5	15.0	4	PF186%11340BD1x
20	42.0	50.0	35.0	37.5	20.3	1.2	40	800	2400	6.5	30	8.5	16.5	4	PF206%11340BD1x
25	42.0	55.0	40.0	37.5	20.3	1.2	40	1000	3000	5.0	30	7.1	20.5	4	PF256%11340BD1x
30	42.0	60.0	45.0	37.5	20.3	1.2	40	1200	3600	4.3	30	5.8	24.5	4	PF306%11340BD1x
15	57.5	45.0	25.0	52.5	10.2	1.2	20	300	900	16.5	35	21.5	6.5	4	PF156%11540BD1x
20	57.5	45.0	30.0	52.5	20.3	1.2	20	400	1200	11.5	35	16.1	9.0	4	PF206%11540BD1x
25	57.5	50.0	35.0	52.5	20.3	1.2	20	500	1500	10.0	35	12.4	11.0	4	PF256%11540BD1x
30	57.5	50.0	35.0	52.5	20.3	1.2	20	600	1800	8.6	35	10.3	13.0	4	PF306%11540BD1x
35	57.5	55.0	45.0	52.5	20.3	1.2	20	700	2100	7.5	35	9.5	14.5	4	PF356%11540BD1x
40	57.5	55.0	45.0	52.5	20.3	1.2	20	800	2400	6.8	35	8.6	16.0	4	PF406%11540BD1x
45	57.5	55.0	45.0	52.5	20.3	1.2	20	900	2700	6.2	35	7.9	17.5	4	PF456%11540BD1x
50	57.5	65.0	45.0	52.5	20.3	1.2	20	1000	3000	5.6	35	7.0	19.5	4	PF506%11540BD1x
55	57.5	65.0	45.0	52.5	20.3	1.2	20	1100	3300	4.8	35	6.8	21.5	4	PF556%11540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ELECTRICAL SPECIFICATION – 1200VDC (12)

CAP	Dimensions (mm)						dv/dt	Peak Current	Surge Current	ESR 10KHz	ESL	Thermal Res	Irms 10KHz 70°C	No of Pin	Part Number
(uF)	L	H	T	P	P1	d	(V/us)	(A)	(A)	(mΩ)	(nH)	(°C/W)	(A)		
1	32.0	20.0	11.0	27.5	-	0.8	90	90	270	35.0	25	35.0	3.5	2	PF105%12220BD1x
2	32.0	24.5	15.0	27.5	-	0.8	90	180	540	24.0	25	25.0	5.0	2	PF205%12220BD1x
3	32.0	30.0	16.0	27.5	-	0.8	90	270	810	13.0	25	20.5	7.5	2	PF305%12220BD1x
4	32.0	33.0	18.0	27.5	-	0.8	90	360	1080	11.0	25	15.1	9.5	2	PF405%12220BD1x
5	32.0	37.0	22.0	27.5	-	0.8	90	450	1350	10.5	25	13.0	10.5	2	PF505%12221BD1x
5	32.0	37.0	22.0	27.5	10.2	1.0	90	450	1350	9.5	25	11.0	12.0	4	PF505%12242BD1x
3	42.0	30.0	17.0	37.5	-	1.0	45	135	405	35.0	28	41.9	3.2	2	PF305%12320BD1x
4	42.0	30.0	17.0	37.5	-	1.0	45	180	540	28.0	28	30.4	4.2	2	PF405%12320BD1x
5	42.0	32.0	19.0	37.5	-	1.0	45	225	675	21.5	28	23.1	5.5	2	PF505%12320BD1x
6	42.0	40.0	20.0	37.5	10.2	1.2	45	270	810	16.5	30	21.5	6.5	4	PF605%12340BD1x
7	42.0	37.0	22.0	37.5	10.2	1.2	45	315	945	13.0	30	20.5	7.5	4	PF705%12340BD1x
8	42.0	44.0	24.0	37.5	10.2	1.2	45	360	1080	12.0	30	17.3	8.5	4	PF805%12340BD1x
9	42.0	44.0	24.0	37.5	10.2	1.2	45	405	1215	10.8	30	13.9	10.0	4	PF905%12340BD1x
10	42.0	44.0	24.0	37.5	10.2	1.2	45	450	1350	10.0	30	12.4	11.0	4	PF106%12340BD1x
12	42.0	45.0	30.0	37.5	20.3	1.2	45	540	1620	8.5	30	10.4	13.0	4	PF126%12340BD1x
15	42.0	50.0	35.0	37.5	20.3	1.2	45	675	2025	6.8	30	8.6	16.0	4	PF156%12340BD1x
18	42.0	50.0	35.0	37.5	20.3	1.2	45	810	2430	6.2	30	7.5	18.0	4	PF186%12340BD1x
20	42.0	55.0	40.0	37.5	20.3	1.2	45	900	2700	5.5	30	6.8	20.0	4	PF206%12340BD1x
25	42.0	60.0	45.0	37.5	20.3	1.2	45	1125	3375	4.3	30	5.6	25.0	4	PF256%12340BD1x
12	57.5	45.0	25.0	52.5	10.2	1.2	25	300	900	16.5	35	21.5	6.5	4	PF126%12540BD1x
15	57.5	45.0	25.0	52.5	10.2	1.2	25	375	1125	13.0	35	20.5	7.5	4	PF156%12540BD1x
20	57.5	45.0	30.0	52.5	20.3	1.2	25	500	1500	10.0	35	12.4	11.0	4	PF206%12540BD1x
25	57.5	50.0	35.0	52.5	20.3	1.2	25	625	1875	8.6	35	10.3	13.0	4	PF256%12540BD1x
30	57.5	55.0	45.0	52.5	20.3	1.2	25	750	2250	7.5	35	9.5	14.5	4	PF306%12540BD1x
35	57.5	55.0	45.0	52.5	20.3	1.2	25	875	2625	6.8	35	8.6	16.0	4	PF356%12540BD1x
40	57.5	65.0	45.0	52.5	20.3	1.2	25	1000	3000	5.5	35	6.8	20.0	4	PF406%12540BD1x
45	57.5	65.0	45.0	52.5	20.3	1.2	25	1125	3375	4.8	35	6.2	22.5	4	PF456%12540BD1x

Note: % denoted to tolerance: ±5%(J), ±10%(K), ±20%(M) at 25°C, x denoted to option code, see the parts number system

ENVIRONMENTAL TEST

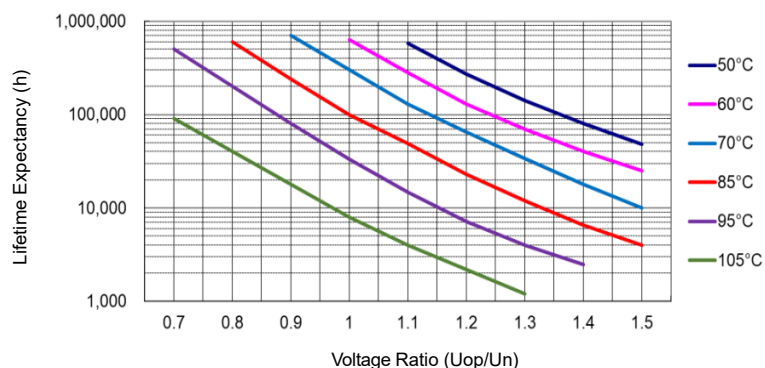
Item	Test Condition	Performance											
Temperature Humidity Bias (THB) Test	Temperature: +85 ±2°C, Humidity: 85% RH, Duration: 1000 +24/0 hours Loading Voltage: Rated Voltage Stabilized for 4 hours at standard temperature and humidity before measurements.	ΔC/C: ≤ ±10% DF: ≤ 80*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
High Temperature Loading	Temperature: +85 ±2 °C, Apply 130% of Rated Voltage for 1,000 +24/0 hours. Duration: 500 hours 1000 charges and discharges at 1.4 x I peak (Maximum respective peak current in continuous operation) measurement at 24 ±4 hours after test.	ΔC/C: ≤ ±5% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
Rapid Temperature Change	High Temperature: +105 ±5°C, Low Temperature: -40 ±5°C Temperature Cycle: Total 5 cycles, 30 min ± 10% for each temperature	ΔC/C: ≤ ± 2% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
Humidity Resistance	Temperature: +40°C ±2°C, RH: 90% to 95% Duration: 1344 +24/0 hours	ΔC/C: ≤ ±2% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
Solderability	Soldering temperature: +245 ±5°C, Immersion duration: 2 ±0.5 seconds	More than 95% of Coverage											
Soldering Heat Resistance	Preheat temperature 100°C~120°C, Preheat Duration: 100sec max, Soldering Temperature: +260 ±5°C, Immersion Duration: ≤10 seconds, Depth: 1.5 ±0.5 mm Soldering Temperature: +400°C, Immersion Duration: ≤3 seconds Stabilized for 1.5 ±0.5hr at ordinary condition before measurements	ΔC/C: ≤ ±0.5% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
Resistance to Solvent	Solvent: propanol (isopropyl alcohol) Temperature: 23 ±5°C, Immersion time: 5 ±0.5 minutes, Drying time: 5 minutes Mechanical treatment: 10 rubbing (with cotton-wool)	ΔC/C: ≤ ±1% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
Terminal Strength	<table><tr><th>Item</th><th>D ≤0.80mm</th><th>0.80 < D ≤1.2mm</th><th>Condition</th></tr><tr><td>Tension</td><td>10N</td><td>20N</td><td rowspan="2">Make two successive bends in each direction</td></tr><tr><td>Bending</td><td>5N</td><td>10N</td></tr></table>	Item	D ≤0.80mm	0.80 < D ≤1.2mm	Condition	Tension	10N	20N	Make two successive bends in each direction	Bending	5N	10N	No visible damage
Item	D ≤0.80mm	0.80 < D ≤1.2mm	Condition										
Tension	10N	20N	Make two successive bends in each direction										
Bending	5N	10N											
Vibration Resistance	Frequency Change: 10--55--10 Hz, Vibration Distance: 1.5 mm Direction: X, Y, Z, Duration: 2 +1/-0 hours each direction	ΔC/C: ≤ ±1% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit											
Mechanical Shock	Pulse-shape: half-sine wave, Acceleration: 500 m/s ² , Duration of pulse: 11 ms												
Bump	Total number of bumps: 1000 times or 4000 times, Acceleration: 400 m/s ² Pulse duration: 6 ms												

Notes:

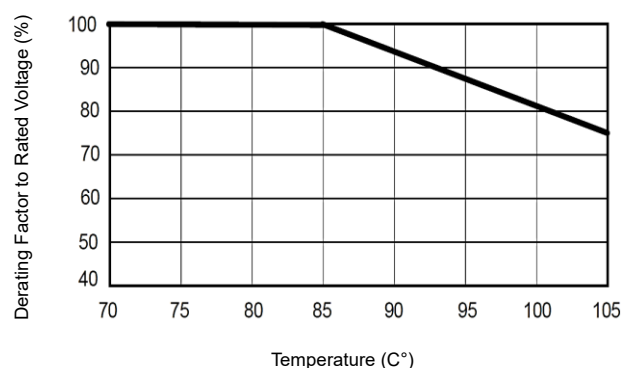
1. Ambient Temp: 15°C to 35°C, Relative Humidity (R.H.): 45% to 75%, Air Pressure: 86kpa to 106kpa
2. Storage needs to be kept indoors at -10~+40°C and relative humidity of under 75% without any sudden temperature changes, direct sunlight and corrosive gas around
3. Do not apply and exceeding vibration, shock (dropping) and pressure
4. Reference Standards: IEC 60068-2, IEC 61071, IEC 68-2

CHARACTERISTIC CURVE

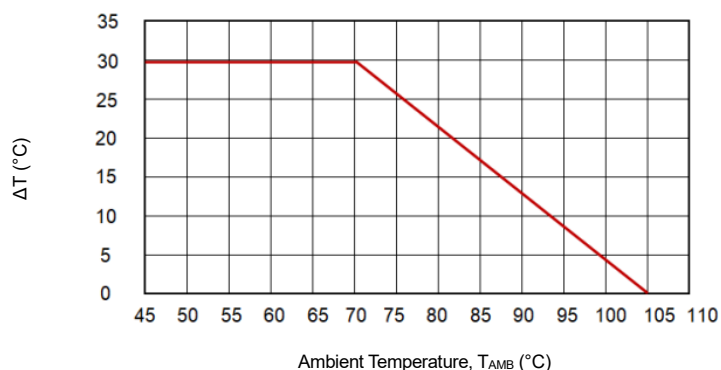
Lifetime Expectancy



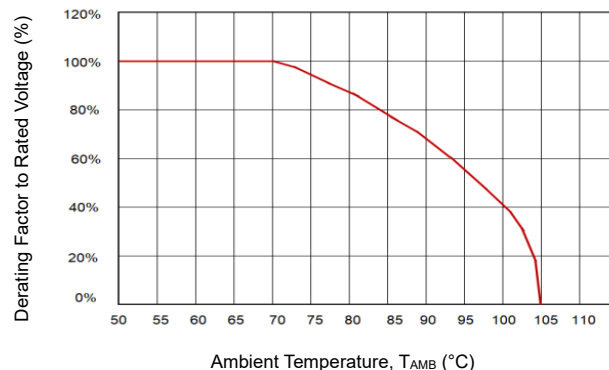
Rated Voltage vs Temperature



Maximum Over-Temperature (ΔT) Vs Ambient Temperature (T_{AMB})



Maximum I_{RMS} Vs Ambient Temperature (T_{AMB})



*Specifications subject to change without notice.