

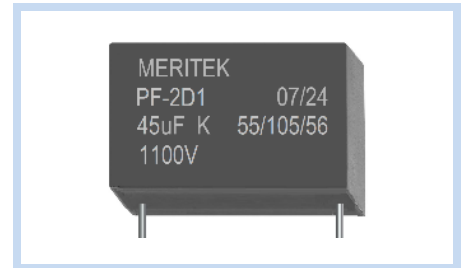
**Power Film Capacitor, DC-Link
THB Grade 2000Hours 125°C Max
AEC-Q200**

PF-2D1 Series

MERITEK

FEATURE

- Self-Healing Property
- High Ripple and Peak (dv/dt) Current Capability
- Low ESL, High Frequency Performance
- High Temperature Capabilities, up to 125°C
- Applications: Renewable Energies Inverters, UPS, Battery Charger, Motor Drive, High Frequency Applications
- THB-2000H, 85°C, 85%RH, V_R, 2000h
- AEC-Q200 Compliant



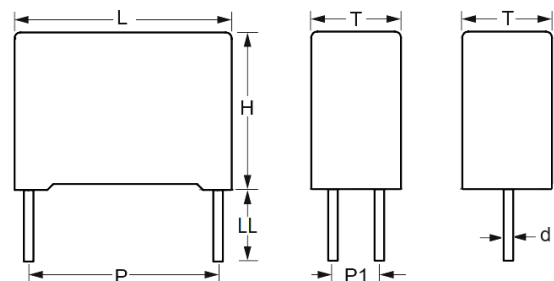
ELECTRICAL CHARACTERISTICS

Item	Characteristic				
Operating Temperature	-55~+125°C (85°C~+125°C Decreasing factor 1.1% per °C for rated voltage)				
Capacitance Range	1.0μF ~ 220μF, ±5%(J), ±10%(K) at 25°C				
Climatic Category	55/105/56 IEC60068-1				
Operating DC Voltage, VNDC	450	600	700	900	1100
Operating DC Voltage, VOP105	351	468	546	702	858
Operating DC Voltage, VOP115	301	402	469	603	737
Operating DC Voltage, VOP125	252	336	392	504	616
Max RMS Current, 70°C 10KHz	4.7~45	4.1~39.4	4.4~38.7	3.5~33.7	4.5~31.2
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 Per 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* VR VDC for 10sec		Between Terminals, for 10sec, at +25°C±5°C		
	3000VAC, 50/60Hz 60sec		Between Terminals and Enclosure, for 60sec, at +25 ±5°C		
Self-inductance	<1nH		per mm of lead spacing		
Life Expectancy	100,000 hours	20,000 hours	5,000 hours	4,000 hours	at hot spot temperature T _{HS}
	V _{NDC} at 85°C	V _{OP105} at 105°C	V _{OP115} at 115°C	V _{OP125} at 125°C	

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 15 540 2D1 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 Voltage	15	15: 1500VDC 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
(5)	Series Code	2D1	DC Link Capacitor Series, Box Type, 125C Max Temp, THB-2000H, 85°C, 85%RH, VR, 2000h
(6)	Option Code	5	5: LL 5mm Bulk package 4: LL 4mm, Blank: LL: 15mm min, Bulk package

ELECTRICAL SPECIFICATION – 450VDC (45)

CAP (μ F)	Dimensions (mm)						dv/dt (V/us)	Peak Current (A)	Surge Current (A)	ESR 10KHz (m Ω)	ESL (nH)	Thermal Rth (°C/W)	Irms 10KHz 75°C (A)	No of Pin	Part Number
	L	H	T	P	P1	d									
3.3	32	18	9	27.5	-	0.8	65	215	644	22.1	12	41.7	4.7	2	PF335%452202D1x
4	32	18	9	27.5	-	0.8	65	260	780	18.2	12	41.7	5.1	2	PF405%452202D1x
5	32	20	11	27.5	-	0.8	65	325	975	14.6	14	35.7	6.2	2	PF505%452202D1x
6	32	20	11	27.5	-	0.8	65	390	1170	12.1	14	35.7	6.8	2	PF605%452202D1x
7	32	22	13	27.5	-	0.8	65	455	1365	10.4	15	33.3	7.6	2	PF705%452202D1x
8	32	22	13	27.5	-	0.8	65	520	1560	9.1	15	33.3	8.1	2	PF805%452202D1x
10	32	25	13	27.5	-	0.8	65	650	1950	7.3	16	31.3	9.4	2	PF106%452202D1x
12	32	28	14	27.5	-	0.8	65	780	2340	6.1	18	27.8	10.9	2	PF126%452202D1x
13	32	28	14	27.5	-	0.8	65	845	2535	5.6	18	27.8	11.3	2	PF136%452202D1x
14	32	30	16	27.5	-	0.8	65	910	2730	5.2	18	26.3	12.1	2	PF146%452202D1x
15	32	30	16	27.5	-	0.8	65	975	2925	4.9	18	26.3	12.5	2	PF156%452212D1x
15	32	28	18	27.5	-	0.8	65	975	2925	5.2	19	23.8	12.7	2	PF156%452222D1x
16	32	28	18	27.5	-	0.8	65	1040	3120	4.6	19	23.8	13.6	2	PF166%452202D1x
18	32	33	18	27.5	-	0.8	65	1170	3510	4.3	21	21.7	14.6	2	PF186%452202D1x
20	32	33	18	27.5	-	0.8	65	1300	3900	3.9	21	21.7	15.4	2	PF206%452202D1x
22	32	37	22	27.5	-	0.8	65	1430	4290	4.3	23	17.2	16.5	2	PF226%452202D1x
25	32	37	22	27.5	-	0.8	65	1625	4875	3.7	23	17.2	17.6	2	PF256%452202D1x
28	32	37	22	27.5	-	0.8	65	1820	5460	3.3	23	17.2	18.6	2	PF286%452202D1x
20	42	28	17	37.5	-	1.0	35	700	2100	8.4	12	20	10.9	2	PF206%453202D1x
25	42	32	19	37.5	-	1.0	35	875	2625	6.8	13	17.9	12.9	2	PF256%453202D1x
30	42	37	22	37.5	10.2	1.2	35	1050	3150	5.6	14	14.3	15.8	4	PF306%453402D1x
35	42	37	22	37.5	10.2	1.2	35	1225	3675	4.8	14	14.3	17.0	4	PF356%453402D1x
40	42	40	20	37.5	10.2	1.2	35	1400	4200	4.2	14	13.9	18.5	4	PF406%453412D1x
40	42	37	22	37.5	10.2	1.2	35	1400	4200	4.2	14	14.3	18.2	4	PF406%453422D1x
50	42	37	28	37.5	10.2	1.2	35	1750	5250	3.4	15	12.2	22.0	4	PF506%453402D1x
55	42	44	24	37.5	10.2	1.2	35	1925	5775	3.1	15	12.2	23.1	4	PF556%453402D1x
60	42	43	28	37.5	10.2	1.2	35	2100	6300	2.8	16	11.8	24.6	4	PF606%453402D1x
65	42	45	30	37.5	20.3	1.2	35	2275	6825	2.6	16	10.0	27.7	4	PF656%453402D1x
70	42	45	30	37.5	20.3	1.2	35	2450	7350	2.4	16	10.0	28.8	4	PF706%453402D1x
80	42	45	35	37.5	20.3	1.2	35	2800	8400	2.1	17	9.1	32.3	4	PF806%453402D1x
90	42	50	35	37.5	20.3	1.2	35	3150	9450	2.1	17	8.3	33.5	4	PF906%453402D1x
110	42	55	40	37.5	20.3	1.2	35	3850	11550	2.1	18	7.7	35.2	4	PF117%453412D1x
110	42	57	38	37.5	20.3	1.2	35	3850	11550	2.1	18	7.7	35.2	4	PF117%453422D1x
120	42	55	40	37.5	20.3	1.2	35	4200	12600	1.9	18	7.7	36.8	4	PF127%453402D1x
140	42	60	45	37.5	20.3	1.2	35	4900	14700	1.6	20	7.1	41.2	4	PF147%453402D1x
80	57.5	45	25	52.5	10.2	1.2	20	1600	4800	4.9	14	9.1	21.2	4	PF806%455402D1x
100	57.5	45	30	52.5	20.3	1.2	20	2000	6000	3.9	15	8.0	25.3	4	PF107%455402D1x
130	57.5	50	35	52.5	20.3	1.2	20	2600	7800	3.0	17	6.9	31.1	4	PF137%455402D1x
160	57.5	60	35	52.5	20.3	1.2	20	3200	9600	2.4	18	6.1	36.8	4	PF167%455402D1x
170	57.5	55	45	52.5	20.3	1.2	20	3400	10200	2.5	18	6.1	36.5	4	PF177%455402D1x
180	57.5	65	35	52.5	20.3	1.2	20	3600	10800	2.4	18	5.7	38.6	4	PF187%455412D1x
180	57.5	55	45	52.5	20.3	1.2	20	3600	10800	2.4	19	5.4	39.6	4	PF187%455422D1x
210	57.5	65	45	52.5	20.3	1.2	20	4200	12600	2.0	20	5.1	44.0	4	PF217%455402D1x
220	57.5	65	45	52.5	20.3	1.2	20	4400	13200	1.9	20	5.1	45.0	4	PF227%455402D1x

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

ELECTRICAL SPECIFICATION – 600VDC (60)

CAP (uF)	Dimensions (mm)						dv/dt (V/us)	Peak Current (A)	Surge Current (A)	ESR 10KHz (mΩ)	ESL (nH)	Thermal Rth (°C/W)	Irms 10KHz 75°C (A)	No of Pin	Part Number
	L	H	T	P	P1	d									
2	32	18	9	27.5	-	0.8	65	130	390	28.1	12	41.7	4.1	2	PF205%602202D1x
3	32	20	11	27.5	-	0.8	65	195	585	18.7	14	35.7	5.5	2	PF305%602202D1x
3.3	32	20	11	27.5	-	0.8	65	195	585	17.0	14	35.7	5.7	2	PF335%602202D1x
4	32	20	11	27.5	-	0.8	65	260	780	14.0	14	35.7	6.3	2	PF405%602202D1x
5	32	22	13	27.5	-	0.8	65	325	975	11.2	15	33.3	7.3	2	PF505%602202D1x
6	32	24.5	13	27.5	-	0.8	65	390	1170	9.4	16	31.3	8.3	2	PF605%602202D1x
7	32	24.5	15	27.5	-	0.8	65	455	1365	8.0	17	28.6	9.3	2	PF705%602212D1x
7	32	28	14	27.5	-	0.8	65	520	1560	8.0	17	27.8	9.5	2	PF705%602222D1x
8	32	28	14	27.5	-	0.8	65	520	1560	7.0	17	27.8	10.1	2	PF805%602202D1x
9	32	30	16	27.5	-	0.8	65	585	1755	6.2	18	26.3	11.0	2	PF905%602202D1x
10	32	28	18	27.5	-	0.8	65	650	1950	5.6	19	23.8	12.2	2	PF106%602202D1x
11	32	33	18	27.5	-	0.8	65	715	2145	5.1	21	21.7	13.4	2	PF116%602202D1x
12	32	33	18	27.5	-	0.8	65	780	2340	4.7	21	21.7	14.0	2	PF126%602202D1x
15	32	37	22	27.5	-	0.8	65	975	2925	4.8	23	17.2	15.5	2	PF156%602202D1x
18	32	37	22	27.5	-	0.8	65	1170	3510	4.0	23	17.2	17.0	2	PF186%602202D1x
15	42	32	19	37.5	-	1.0	35	525	1575	8.7	13	17.9	11.4	2	PF156%603202D1x
22	42	40	20	37.5	10.2	1.2	35	770	2310	5.9	14	13.9	15.6	4	PF226%603402D1x
25	42	40	20	37.5	10.2	1.2	35	875	2625	5.2	14	13.9	16.6	4	PF256%603402D1x
30	42	37	28	37.5	10.2	1.2	35	1050	3150	4.3	15	12.2	19.4	4	PF306%603402D1x
33	42	44	24	37.5	10.2	1.2	35	1155	3465	4.0	15	12.2	20.4	4	PF336%603402D1x
40	42	45	30	37.5	20.3	1.2	35	1400	4200	3.3	16	10.0	24.8	4	PF406%603402D1x
45	42	45	35	37.5	20.3	1.2	35	1575	4725	2.9	17	9.1	27.6	4	PF456%603402D1x
50	42	50	35	37.5	20.3	1.2	35	1750	5250	3.0	17	8.3	28.5	4	PF506%603402D1x
60	42	55	40	37.5	20.3	1.2	35	2100	6300	3.0	18	7.7	29.6	4	PF606%603402D1x
66	42	57	38	37.5	20.3	1.2	35	2100	6300	2.7	18	7.7	31.1	4	PF606%603402D1x
70	42	55	40	37.5	20.3	1.2	35	2450	7350	2.5	18	7.7	32.0	4	PF706%603402D1x
75	42	60	45	37.5	20.3	1.2	35	2625	7875	2.4	20	7.1	34.4	4	PF756%603402D1x
80	42	60	45	37.5	20.3	1.2	35	2800	8400	2.2	20	7.1	35.5	4	PF806%603402D1x
85	42	60	45	37.5	20.3	1.2	35	2975	8925	2.1	20	7.1	36.6	4	PF856%603402D1x
45	57.5	45	25	52.5	10.2	1.2	20	900	2700	6.7	14	9.1	18.1	4	PF456%605402D1x
50	57.5	45	25	52.5	10.2	1.2	20	1000	3000	6.0	14	9.1	19.1	4	PF506%605402D1x
55	57.5	45	30	52.5	20.3	1.2	20	1100	3300	5.5	15	8.0	21.4	4	PF556%605402D1x
60	57.5	45	30	52.5	20.3	1.2	20	1200	3600	5.0	15	8.0	22.3	4	PF606%605402D1x
65	57.5	50	35	52.5	20.3	1.2	20	1300	3900	4.6	17	6.9	25.0	4	PF656%605402D1x
70	57.5	50	35	52.5	20.3	1.2	20	1400	4200	4.3	17	6.9	26.0	4	PF706%605402D1x
75	57.5	50	35	52.5	20.3	1.2	20	1500	4500	4.0	17	6.9	26.9	4	PF756%605402D1x
80	57.5	50	35	52.5	20.3	1.2	20	1600	4800	3.8	17	6.9	27.8	4	PF806%605402D1x
90	57.5	60	35	52.5	20.3	1.2	20	1800	5400	3.3	18	6.1	31.4	4	PF906%605402D1x
100	57.5	60	35	52.5	20.3	1.2	20	2000	6000	3.0	18	6.1	33.1	4	PF107%605402D1x
110	57.5	65	35	52.5	20.3	1.2	20	2200	6600	3.0	18	5.7	34.3	4	PF117%605412D1x
110	57.5	55	45	52.5	20.3	1.2	20	2200	6600	3.0	19	5.4	35.3	4	PF117%605422D1x
130	57.5	65	45	52.5	20.3	1.2	20	2600	7800	2.5	20	5.1	39.4	4	PF137%605402D1x

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

ELECTRICAL SPECIFICATION – 700VDC (70)

CAP (μ F)	Dimensions (mm)						dv/dt (V/us)	Peak Current (A)	Surge Current (A)	ESR 10KHz (m Ω)	ESL (nH)	Thermal Rth (°C/W)	Irms 10KHz 75°C (A)	No of Pin	Part Number
	L	H	T	P	P1	d									
2	32	18	9	27.5	-	0.8	65	130	390	24.6	12	41.7	4.4	2	PF205%702202D1x
2.7	32	20	11	27.5	-	0.8	65	195	585	18.2	14	35.7	5.5	2	PF275%702202D1x
3	32	20	11	27.5	-	0.8	65	195	585	16.4	14	35.7	5.8	2	PF305%702202D1x
4	32	24.5	13	27.5	-	0.8	65	260	780	12.3	16	31.3	7.2	2	PF405%702202D1x
5	32	24	14	27.5	-	0.8	65	325	975	9.8	17	29.4	8.3	2	PF505%702212D1x
5	32	28	14	27.5	-	0.8	65	325	975	9.8	17	27.8	8.6	2	PF505%702222D1x
5	32	24.5	15	27.5	-	0.8	65	325	975	9.8	17	28.6	8.4	2	PF505%702232D1x
6	32	30	16	27.5	-	0.8	65	390	1170	8.2	18	26.3	9.6	2	PF605%702202D1x
6.5	32	30	16	27.5	-	0.8	65	390	1170	7.6	18	26.3	10.0	2	PF655%702202D1x
7	32	30	16	27.5	-	0.8	65	455	1365	7.0	18	26.3	10.4	2	PF705%702202D1x
8	32	28	18	27.5	-	0.8	65	520	1560	6.1	19	23.8	11.7	2	PF805%702202D1x
8.5	32	33	18	27.5	-	0.8	65	585	1755	5.8	21	21.7	12.6	2	PF855%702202D1x
9	32	33	18	27.5	-	0.8	65	585	1755	5.5	21	21.7	13.0	2	PF905%702202D1x
10	32	33	18	27.5	-	0.8	65	650	1950	4.9	21	21.7	13.7	2	PF106%702202D1x
12	32	37	22	27.5	-	0.8	65	780	2340	5.3	23	17.2	14.8	2	PF126%702202D1x
14	32	37	22	27.5	-	0.8	65	910	2730	4.5	23	17.2	16.0	2	PF146%702212D1x
14	42	32	19	37.5	-	1	35	490	1470	8.1	13	17.9	11.7	2	PF146%703222D1x
15	42	40	20	37.5	10.2	1.2	35	525	1575	7.6	14	13.9	13.8	4	PF156%703402D1x
20	42	37	28	37.5	10.2	1.2	35	700	2100	5.7	15	12.2	17.0	4	PF206%703402D1x
22	42	37	28	37.5	10.2	1.2	35	770	2310	5.2	15	12.2	17.8	4	PF226%703402D1x
24	42	44	24	37.5	10.2	1.2	35	875	2625	4.8	15	12.2	18.6	4	PF246%703402D1x
25	42	44	24	37.5	10.2	1.2	35	875	2625	4.6	15	12.2	19.0	4	PF256%703412D1x
25	42	43	28	37.5	10.2	1.2	35	875	2625	4.6	16	11.8	19.3	4	PF256%703422D1x
30	42	45	30	37.5	20.3	1.2	35	1050	3150	3.8	16	10.0	22.9	4	PF306%703402D1x
35	42	45	35	37.5	20.3	1.2	35	1225	3675	3.3	17	9.1	26.0	4	PF356%703402D1x
40	42	50	35	37.5	20.3	1.2	35	1400	4200	3.2	17	8.3	27.2	4	PF406%703402D1x
45	42	55	40	37.5	20.3	1.2	35	1575	4725	3.5	18	7.7	27.4	4	PF456%703402D1x
50	42	55	40	37.5	20.3	1.2	35	1750	5250	3.1	18	7.7	28.9	4	PF506%703402D1x
52	42	57	38	37.5	20.3	1.2	35	1925	5775	3.0	18	7.7	29.5	4	PF526%703402D1x
55	42	55	40	37.5	20.3	1.2	35	1925	5775	2.8	18	7.7	30.3	4	PF556%703402D1x
60	42	60	45	37.5	20.3	1.2	35	2100	6300	2.6	20	7.1	32.9	4	PF606%703402D1x
65	42	60	45	37.5	20.3	1.2	35	2275	6825	2.4	20	7.1	34.2	4	PF656%703402D1x
30	57.5	45	25	52.5	10.2	1.2	20	600	1800	8.8	14	9.1	15.8	4	PF306%705402D1x
35	57.5	45	25	52.5	10.2	1.2	20	700	2100	7.5	14	9.1	17.1	4	PF356%705402D1x
40	57.5	45	30	52.5	20.3	1.2	20	800	2400	6.6	15	8.0	19.5	4	PF406%705402D1x
45	57.5	45	30	52.5	20.3	1.2	20	900	2700	5.9	15	8.0	20.7	4	PF456%705402D1x
50	57.5	50	35	52.5	20.3	1.2	20	1000	3000	5.3	17	6.9	23.5	4	PF506%705402D1x
55	57.5	50	35	52.5	20.3	1.2	20	1100	3300	4.8	17	6.9	24.6	4	PF556%705402D1x
60	57.5	50	35	52.5	20.3	1.2	20	1200	3600	4.4	17	6.9	25.7	4	PF606%705402D1x
70	57.5	60	35	52.5	20.3	1.2	20	1400	4200	4.1	18	6.1	28.4	4	PF706%705402D1x
75	57.5	60	35	52.5	20.3	1.2	20	1500	4500	3.8	18	6.1	29.4	4	PF756%705402D1x
85	57.5	65	35	52.5	20.3	1.2	20	1700	5100	3.4	18	5.7	32.3	4	PF856%705412D1x
85	57.5	65	45	52.5	20.3	1.2	20	1760	5280	3.4	19	5.4	33.2	4	PF856%705422D1x
100	57.5	65	45	52.5	20.3	1.2	20	2000	6000	2.9	20	5.1	36.9	4	PF107%705402D1x
110	57.5	65	45	52.5	20.3	1.2	20	2200	6600	2.6	20	5.1	38.7	4	PF117%705402D1x

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

ELECTRICAL SPECIFICATION – 900VDC (90)

CAP (uF)	Dimensions (mm)						dv/dt (V/us)	Peak Current (A)	Surge Current (A)	ESR 10KHz (mΩ)	ESL (nH)	Thermal Rth (°C/W)	Irms 10KHz 75°C (A)	No of Pin	Part Number
	L	H	T	P	P1	d									
1	32	18	9	27.5	-	0.8	65	65	195	39.3	12	41.7	3.5	2	PF105%902202D1x
1.8	32	20	11	27.5	-	0.8	65	117	351	21.9	14	35.7	5.1	2	PF185%902202D1x
2	32	22	13	27.5	-	0.8	65	130	390	19.7	15	33.3	5.5	2	PF205%902202D1x
2.2	32	22	13	27.5	-	0.8	65	143	429	17.9	15	33.3	5.8	2	PF225%902202D1x
2.7	32	24.5	13	27.5	-	0.8	65	143	429	14.6	17	29.4	6.6	2	PF275%902202D1x
3	32	24	14	27.5	-	0.8	65	195	585	13.1	17	29.4	7.2	2	PF305%902202D1x
3.3	32	28	14	27.5	-	0.8	65	215	644	11.9	17	27.8	7.8	2	PF335%902202D1x
4	32	30	16	27.5	-	0.8	65	260	780	9.8	18	26.3	8.8	2	PF405%902202D1x
5	32	28	18	27.5	-	0.8	65	325	975	7.9	19	23.8	10.3	2	PF505%902202D1x
5.5	32	33	18	27.5	-	0.8	65	390	1170	7.2	21	21.7	11.3	2	PF555%902202D1x
6	32	33	18	27.5	-	0.8	65	390	1170	6.6	21	21.7	11.8	2	PF605%902202D1x
7	32	37	22	27.5	-	0.8	65	455	1365	7.2	23	17.2	12.7	2	PF705%902202D1x
8	32	37	22	27.5	-	0.8	65	520	1560	6.3	23	17.2	13.5	2	PF805%902202D1x
7	42	29	17	37.5	-	1.0	35	245	735	13	12	19.2	8.9	2	PF705%903202D1x
8	42	32	19	37.5	-	1.0	35	280	840	11.4	13	17.9	9.9	2	PF805%903202D1x
12	42	40	20	37.5	10.2	1.2	35	420	1260	7.6	14	13.9	13.8	4	PF126%903412D1x
12	42	37	22	37.5	10.2	1.2	35	420	1260	7.6	14	14.3	13.6	4	PF126%903422D1x
14	42	37	22	37.5	10.2	1.2	35	490	1470	6.5	14	14.3	14.7	4	PF146%903402D1x
15	42	44	24	37.5	10.2	1.2	35	525	1575	6.1	15	12.2	16.4	4	PF156%903402D1x
16	42	43	28	37.5	10.2	1.2	35	560	1680	5.7	16	11.8	17.3	4	PF166%903402D1x
18	42	45	30	37.5	20.3	1.2	35	630	1890	5.1	16	10.0	19.9	4	PF186%903402D1x
20	42	45	30	37.5	20.3	1.2	35	700	2100	4.6	16	10.0	20.9	4	PF206%903402D1x
22	42	45	35	37.5	20.3	1.2	35	770	2310	4.1	17	9.1	23.0	4	PF226%903402D1x
25	42	50	35	37.5	20.3	1.2	35	875	2625	4.1	17	8.3	24.1	4	PF256%903402D1x
30	42	55	40	37.5	20.3	1.2	35	1050	3150	4.1	18	7.7	25.0	4	PF306%903402D1x
33	42	57	38	37.5	20.3	1.2	35	1225	3675	3.8	18	7.7	26.3	4	PF336%903402D1x
35	42	55	40	37.5	20.3	1.2	35	1225	3675	3.6	18	7.7	27.0	4	PF356%903402D1x
40	42	60	45	37.5	20.3	1.2	35	1400	4200	3.1	20	7.1	30.0	4	PF406%903402D1x
25	57.5	45	25	52.5	10.2	1.2	20	500	1500	8.4	14	9.1	16.2	4	PF256%905402D1x
30	57.5	45	30	52.5	20.3	1.2	20	600	1800	7.0	15	8.0	18.9	4	PF306%905402D1x
35	57.5	45	30	52.5	20.3	1.2	20	700	2100	6.0	15	8.0	20.4	4	PF356%905402D1x
40	57.5	50	35	52.5	20.3	1.2	20	800	2400	5.3	17	6.9	23.5	4	PF406%905402D1x
45	57.5	60	35	52.5	20.3	1.2	20	900	2700	4.7	18	6.1	26.5	4	PF456%905402D1x
50	57.5	60	35	52.5	20.3	1.2	20	1000	3000	4.2	18	6.1	28.0	4	PF506%905402D1x
55	57.5	65	35	52.5	20.3	1.2	20	1100	3300	4.2	18	5.7	29.0	4	PF556%905412D1x
55	57.5	55	45	52.5	20.3	1.2	20	1140	3420	4.2	19	5.4	29.0	4	PF556%905422D1x
57	57.5	55	45	52.5	20.3	1.2	20	1140	3420	4.0	19	5.4	30.4	4	PF576%905402D1x
65	57.5	65	45	52.5	20.3	1.2	20	1300	3900	3.5	20	5.1	33.3	4	PF656%905402D1x
70	57.5	65	45	52.5	20.3	1.2	20	1400	4200	3.4	20	5.1	33.7	4	PF706%905402D1x

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

ELECTRICAL SPECIFICATION – 1100VDC (11)

CAP (μ F)	Dimensions (mm)						dv/dt (V/us)	Peak Current (A)	Surge Current (A)	ESR 10KHz (m Ω)	ESL (nH)	Thermal Rth (°C/W)	Irms 10KHz 75°C (A)	No of Pin	Part Number
	L	H	T	P	P1	d									
1	32	20	11	27.5	-	0.8	65	65	195	27.3	14	35.7	4.5	2	PF105%112202D1x
1.2	32	20	11	27.5	-	0.8	65	78	234	27.3	14	35.7	4.5	2	PF125%112202D1x
1.5	32	22	13	27.5	-	0.8	65	98	293	21.9	15	33.3	5.2	2	PF155%112202D1x
2	32	24.5	13.0	27.5	-	0.8	65	130	390	16.4	16	31.3	6.2	2	PF205%112202D1x
2.2	32	28	14	27.5	-	0.8	65	143	429	14.9	17	27.8	7.0	2	PF225%112202D1x
2.7	32	30	16	27.5	-	0.8	65	195	585	12.1	18	26.3	7.9	2	PF275%112202D1x
3	32	30	16	27.5	-	0.8	65	195	585	10.9	18	26.3	8.3	2	PF305%112202D1x
3.3	32	28	18	27.5	-	0.8	65	215	644	9.9	19	23.8	9.2	2	PF335%112202D1x
3.7	32	33	18	27.5	-	0.8	65	260	780	8.9	21	21.7	10.2	2	PF375%112202D1x
4	32	33	18	27.5	-	0.8	65	260	780	8.2	21	21.7	10.6	2	PF405%112202D1x
5	32	37	22	27.5	-	0.8	65	325	975	6.6	23	17.2	13.3	2	PF505%112202D1x
4.5	42	29	17	37.5	-	1.0	35	158	473	16.9	12	19.2	7.8	2	PF455%113202D1x
5.5	42	32	19	37.5	-	1.0	35	193	578	13.8	13	17.9	9.0	2	PF555%113202D1x
8	42	40	20	37.5	10.2	1.2	35	280	840	9.5	14	13.9	12.3	4	PF805%113402D1x
10	42	37	28	37.5	10.2	1.2	35	350	1050	7.6	15	12.2	14.7	4	PF106%113402D1x
11	42	44	24	37.5	10.2	1.2	35	385	1155	6.9	15	12.2	15.4	4	PF116%113402D1x
12	42	43	28	37.5	10.2	1.2	35	420	1260	6.3	16	11.8	16.4	4	PF126%113402D1x
13	42	43	28	37.5	10.2	1.2	35	455	1365	5.8	16	11.8	17.0	4	PF136%113402D1x
14	42	45	30	37.5	20.3	1.2	35	490	1470	5.4	16	10.0	19.2	4	PF146%113402D1x
15	42	45	35	37.5	20.3	1.2	35	525	1575	5.1	17	9.1	20.8	4	PF156%113402D1x
16	42	45	35	37.5	20.3	1.2	35	560	1680	4.8	17	9.1	21.5	4	PF166%113402D1x
17	42	50	35	37.5	20.3	1.2	35	630	1890	5.1	17	8.3	21.7	4	PF176%113402D1x
18	42	50	35	37.5	20.3	1.2	35	630	1890	4.8	17	8.3	22.4	4	PF186%113402D1x
22	42	55	40	37.5	20.3	1.2	35	770	2310	3.9	18	7.7	25.7	4	PF226%113412D1x
22	42	57	38	37.5	20.3	1.2	35	770	2310	3.9	18	7.7	25.7	4	PF226%113422D1x
23	42	55	40	37.5	20.3	1.2	35	805	2415	3.8	18	7.7	26.3	4	PF236%113402D1x
30	42	60	45	37.5	20.3	1.2	35	1050	3150	2.9	20	7.1	31.2	4	PF306%113402D1x
15	57.5	45	25	52.5	10.2	1.2	20	300	900	11.7	14	9.1	13.7	4	PF156%115402D1x
20	57.5	45	30	52.5	20.3	1.2	20	400	1200	8.8	15	8.0	16.9	4	PF206%115402D1x
25	57.5	50	35	52.5	20.3	1.2	20	500	1500	7.0	17	6.9	20.3	4	PF256%115402D1x
33	57.5	60	35	52.5	20.3	1.2	20	660	1980	5.3	18	6.1	24.9	4	PF336%115402D1x
36	57.5	55	45	52.5	20.3	1.2	20	800	2400	5.2	18	5.4	25.7	4	PF366%115402D1x
38	57.5	65	35	52.5	20.3	1.2	20	760	2280	5.0	18	5.7	26.4	4	PF386%115402D1x
40	57.5	55	45	52.5	20.3	1.2	20	800	2400	4.8	19	5.4	27.9	4	PF406%115402D1x
45	57.5	65	45	52.5	20.3	1.2	20	900	2700	4.2	20	5.1	30.3	4	PF456%115402D1x

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

ENVIRONMENTAL TEST

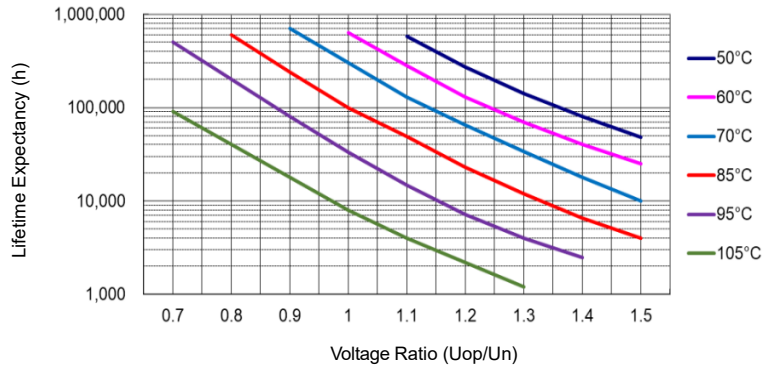
Item	Test Condition	Performance																					
Temperature Humidity Bias (THB) Test	Temperature: +85 ±2°C, Humidity: 85% RH, Duration: 2000 +24/0 hours, Loading Voltage: rated voltage Stabilized for 4 hours at standard temperature and humidity before measurements.	ΔC/C: ≤ ± 10% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit																					
Operational Life	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																					
Temperature Cycle	High Temperature: +105 ±5°C, Low Temperature: -40 ±5°C. Cycle: Total 1000 cycles 30min ± 10% for each temperature, 1 min maximum transition time. Measurement at 24 ±4 hours after test conclusion	ΔC/C: ≤ ± 5% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit																					
High Temperature Exposure (storage)	Temperature: +105 ±2°C, Duration: 1000 +24/0 hours Measurement at 24 ±4 hours after test conclusion	ΔC/C: ≤ ± 3% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit																					
Moisture Resistance	Temperature: +40 ±2°C, Humidity: 90% to 95% RH, Duration: 1344 +24/0 hours Unpowered measurement at 24 ±4hours after test conclusion	ΔC/C: ≤ ± 5% 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: 100 sec 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																					
Temperature Humidity Cycle	Test Humidity: 90% to 95% R.H, Test Temperature Cycle: Total 10 cycles, each cycle includes <table border="1"> <thead> <tr> <th>Cycle</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <td>Temp (°C)</td> <td>+25±2 ~ +65±3</td> <td>+65±3</td> <td>+65±3~ +25±2</td> <td>+25±3~ +65±2</td> <td>+65±3</td> <td>+65±3~ +25±2</td> </tr> <tr> <td>Time (hours)</td> <td>2.5</td> <td>3</td> <td>2.5</td> <td>2.5</td> <td>3</td> <td>2.5</td> </tr> </tbody> </table> Stabilized for 8hr at ordinary condition before measurements	Cycle	1	2	3	4	5	6	Temp (°C)	+25±2 ~ +65±3	+65±3	+65±3~ +25±2	+25±3~ +65±2	+65±3	+65±3~ +25±2	Time (hours)	2.5	3	2.5	2.5	3	2.5	ΔC/C: ≤ ± 5% DF: ≤ 50*10 ⁻⁴ at 1 KHz IR: ≥ 50% of initial limit
Cycle	1	2	3	4	5	6																	
Temp (°C)	+25±2 ~ +65±3	+65±3	+65±3~ +25±2	+25±3~ +65±2	+65±3	+65±3~ +25±2																	
Time (hours)	2.5	3	2.5	2.5	3	2.5																	
Resistance to solvent	Solvent: propanol (isopropyl alcohol) Temperature: 23 ±5°C, Immersion time: 5 ±0.5min, Drying time: 5 mins 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 border="1"> <thead> <tr> <th>Item</th> <th>D ≤0.80mm</th> <th>0.80 < D ≤1.2mm</th> <th>Condition</th> </tr> </thead> <tbody> <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> </tbody> </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	5g force 20 minutes, three directions, 12 cycles in each direction. Test Frequency 10~2000 Hz	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:

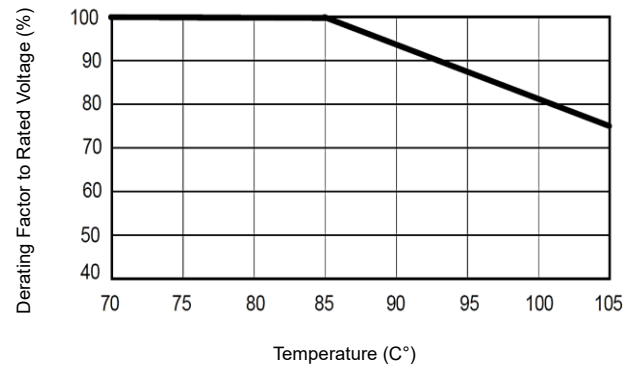
1. Ambient Temp: 15°C to 35°C, Relative Humidity (R.H.): 45% to 75%, Air Pressure: 86kpa to 106kpa
2. Storage needs to be kept indoors at -10~+40°C and relative humidity of under 75% without any sudden temperature changes, direct sunlight and corrosive gas around
3. Do not apply and exceeding vibration, shock (dropping) and pressure
4. Reference Standards: IEC 61071, JESD22 Method JA-104, MIL-STD-202, J-STD-002

CHARACTERISTIC CURVE

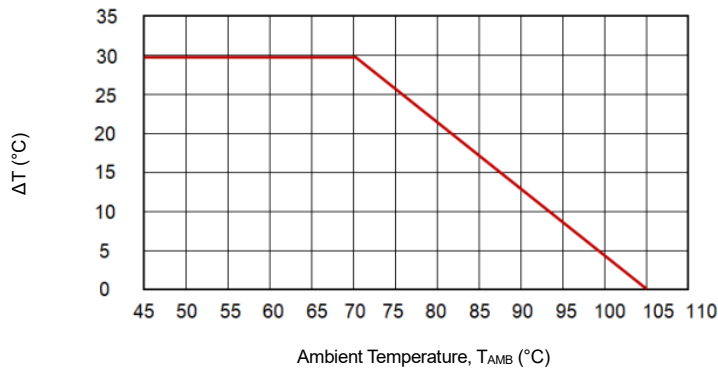
Lifetime Expectancy



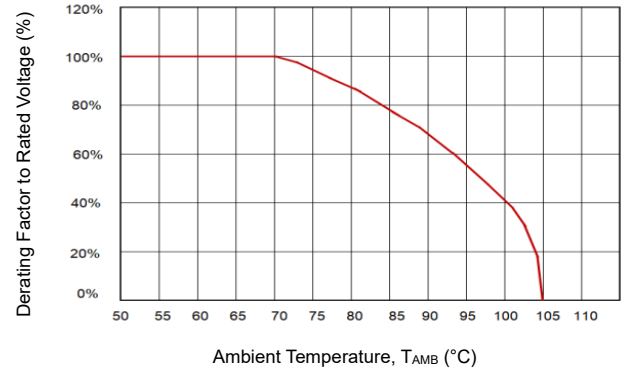
Rated Voltage vs Temperature



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



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



*Specifications subject to change without notice.