

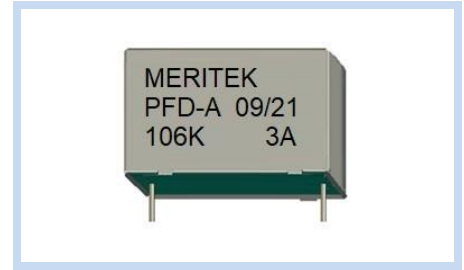
Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

MERITEK

FEATURE

- Self-Healing and Low Loss Property
- High Ripple Current and High dV/dt
- Application: DC Filtering, DC Link, DC Filtering, Energy Storage, Renewable Energy Grid Interface, Motor Drives
- Flammability Classification: UL94-V0
- Reference Standard: IEC61071: 2007
- AEC-Q200 Compliant



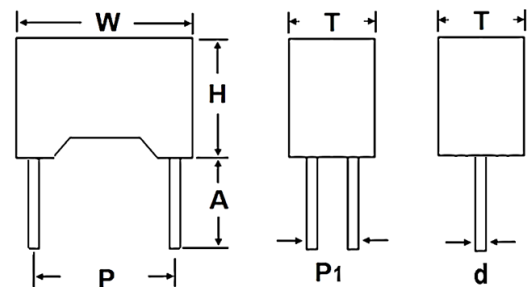
ELECTRICAL CHARACTERISTICS

Item	Characteristic									
Operating Temperature	-40~+105°C (85°C~+105°C Derating factor 1.25% per °C for rated voltage)									
Climatic Category	40/105/56 IEC60068-1									
DC Operating Voltage	at 70°C	500	650	700	800	900	1000	1100	1200	1300
	at 85°C	450	550	600	700	800	900	1000	1100	1200
	at 105°C	300	400	440	490	560	630	700	770	840
Capacitance Range	Cap (μF)	5~200	5~180	2~140	2~140	2~110	1~85	1~70	1~55	1~45
Capacitance Tolerance	Tol (%)	±5%(J), ±10%(K), ±20%(M)								
Dissipation Factor	Cap (μF)	C ≤20μF		C >20μF		C >80μF		at 1KHz; at 25°C		
	DF	≤0.002 (0.2%)		≤0.003 (0.3%)		≤0.004 (0.4%)				
Insulation Resistance	IR*C ≥ 30,000MΩ* μF/C				Between leads, at 100 Vdc, 60 sec, at +25°C ±5°C°					
Withstanding Voltage	1.5*Un VDC for 10sec				Between Terminals, at +25°C±5°C					
	3000VAC, 50/60Hz 60sec				Between Terminals and Enclosure, at +25 ±5°C					
Self-inductance	<1nH				per mm of between Terminals, at +25°C±5°C					
Life Expectancy	100,000 hours				Un, Θ hotspot at 85°C					

DIMENSION

No of Pin	P ±0.5	P1 ±0.5	d ±0.05	Series
2-pin	27.5	NA	0.8	PFD-27A
2-pin	37.5	NA	1.0	PFD-37A
4-pin	27.5	10.2	0.8	PFD-274A
4-pin	37.5	10.2, 20.3	1.0	PFD-374A
4-pin	52.5	20.3	1.2	PFD-524A

See the table below for dimension: W, H, T, A: 5±1.0mm



PART NUMBERING SYSTEM

PFD 106K 3A 374A
(1) (2) (3) (4)

No	Item	Code	Description
(1)	Product Code	PFD	Metalized PP Film Capacitor, Double Sided, Box Type
(2)	Nominal Capacitance	106K	10 μF ± 10%(K) First two digits: Significant, Third: Multiplier
(3)	Rated Voltage	3A	1000VDC DC Voltage Code
(4)	Internal Code	374A	37: 37.5mm pitch, 4A: 4pins AEC-Q200 Compliant

ELECTRICAL SPECIFICATION – 450VDC (45) at 85°C

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 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
5	32	20	11	27.5	--	0.8	65	325	975	20.0	25	30.0	5.0	2	PFD505K4527A
10	32	25.5	16	27.5	--	0.8	65	650	1950	11.0	25	27.8	7.0	2	PFD106K4527A
15	31	33	18	27.5	--	0.8	65	975	2925	7.0	25	17.7	11.0	2	PFD156K4527A
22	32	37	22	27.5	--	0.8	65	1430	4290	5.0	28	24.8	11.0	2	PFD226K4527A
25	32	37	22	27.5	--	0.8	65	1625	4875	4.8	28	24.8	12.0	2	PFD256K4527A
30	42	40	20	37.5	10.2	1.0	35	1050	3150	7.5	30	12.8	12.5	4	PFD306K45374A
35	42.5	37	22	37.5	10.2	1.0	35	1225	3675	7.0	30	11.8	13.5	4	PFD356K45374A
40	42.5	37	28	37.5	10.2	1.0	35	1400	4200	6.2	30	11.5	14.5	4	PFD406K45374A
50	41.5	41	27.5	37.5	10.2	1.0	35	1750	5250	5.0	30	11.7	16.0	4	PFD506K45374A
50	41.5	45	30	37.5	20.3	1.0	35	1750	5250	5.0	30	11.7	16.0	4	PFD506K45374A
60	41.5	45	30	37.5	20.3	1.0	35	2100	6300	4.5	30	12.2	16.5	4	PFD606K45374A
75	57.5	45	30	52.5	20.3	1.2	20	1500	4500	5.5	35	10.0	16.5	4	PFD756K45524A
80	57.5	45	30	52.5	20.3	1.2	20	1600	4800	5.0	35	10.4	17.0	4	PFD806K45524A
100	57.5	50	35	52.5	20.3	1.2	20	2000	6000	4.5	35	10.3	18.0	4	PFD107K45524A
110	57.5	50	35	52.5	20.3	1.2	20	2200	6600	4.0	35	10.4	19.0	4	PFD117K45524A
120	57.5	50	35	52.5	20.3	1.2	20	2400	7200	3.8	35	10.4	21.5	4	PFD127K45524A
150	57.5	65	35	52.5	20.3	1.2	20	3000	9000	3.6	35	10.4	24.5	4	PFD157K45524A
160	58	55	45	52.5	20.3	1.2	20	3200	9600	3.0	35	10.4	28.5	4	PFD167K45524A
200	58	67	45	52.5	20.3	1.2	20	4000	12000	2.6	35	10.4	33.0	4	PFD207K45524A

ELECTRICAL SPECIFICATION – 550VDC (55) at 85°C

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 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
5	31	22	13	27.5	--	0.8	65	325	975	19.5	25	25.4	5.5	2	PFD505K5527A
10	31	33	18	27.5	--	0.8	65	650	1950	10.5	25	25.4	7.5	2	PFD106K5527A
15	32	37	22	27.5	--	0.8	65	975	2925	6.8	28	16.7	11.5	2	PFD156K5527A
22	32	37	22	27.5	--	0.8	65	1430	4290	4.9	28	23.1	11.5	2	PFD226K5527A
30	42.5	44	24	37.5	10.2	1.0	35	1050	3150	7.2	30	12.3	13.0	4	PFD306K55374A
35	41.5	45	30	37.5	20.3	1.0	35	1225	3675	6.8	30	11.6	13.8	4	PFD356K55374A
40	41.5	45	30	37.5	20.3	1.0	35	1400	4200	6.0	30	11.4	14.8	4	PFD406K55374A
75	57.5	45	30	52.5	20.3	1.2	20	1500	4500	5.2	35	10.2	16.8	4	PFD756K55524A
100	57.5	50	35	52.5	20.3	1.2	20	2000	6000	4.3	35	10.2	18.5	4	PFD107K55524A
110	57.5	50	35	52.5	20.3	1.2	20	2200	6600	4.0	35	9.4	20.0	4	PFD117K55524A
140	58	55	45	52.5	20.3	1.2	20	2800	8400	3.5	35	6.3	26.0	4	PFD147K55524A
170	58	67	45	52.5	20.3	1.2	20	3400	10200	2.8	35	5.2	32.0	4	PFD177K55524A
180	58	67	45	52.5	20.3	1.2	20	3600	10800	2.6	35	5.2	33.0	4	PFD187K55524A

Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

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ELECTRICAL SPECIFICATION – 600VDC(60) at 85°C

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)	I _{rms} 10KHz 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
2	32.0	18.0	9.0	27.5	--	0.8	65	130	390	40.0	25	44.6	2.9	2	PFD205K6027A
3	32.0	20.0	11.0	27.5	--	0.8	65	195	585	28.0	25	33.5	4.0	2	PFD305K6027A
4	32.0	20.0	11.0	27.5	--	0.8	65	260	780	23.0	25	21.6	5.5	2	PFD405K6027A
5	31.0	22.0	13.0	27.5	--	0.8	65	325	975	14.5	25	21.1	7.0	2	PFD505K6027A
6	32.0	25.5	16.0	27.5	--	0.8	65	390	1170	13.0	25	21.7	7.3	2	PFD605K6027A
7	32.0	25.5	16.0	27.5	--	0.8	65	455	1365	12.0	25	17.3	8.5	2	PFD705K6027A
8	32.0	28.0	14.0	27.5	--	0.8	65	520	1560	11.0	25	15.1	9.5	2	PFD805K6027A
9	32.0	30.0	15.0	27.5	--	0.8	65	585	1755	10.5	25	13.0	10.5	2	PFD905K6027A
10	32.0	30.0	15.0	27.5	--	0.8	65	650	1950	10.0	25	12.4	11.0	2	PFD106K6027A
12	31.0	33.0	18.0	27.5	--	0.8	65	780	2340	9.5	25	11.0	12.0	2	PFD126K6027A
15	32.0	37.0	22.0	27.5	--	0.8	65	975	2925	9.5	28	11.0	12.0	2	PFD156K6027A
15	32.0	37.0	22.0	27.5	10.2	0.8	65	975	2925	7.0	28	10.2	14.5	4	PFD156K60274A
18	32.0	37.0	22.0	27.5	--	0.8	65	1170	3510	9.0	28	10.7	12.5	2	PFD106K6027A
18	32.0	37.0	22.0	27.5	10.2	0.8	65	1170	3510	6.0	28	9.2	16.5	4	PFD106K60274A
10	41.5	30.0	17.0	37.5	--	1.0	35	350	1050	18.0	28	17.0	7.0	2	PFD106K6037A
12	41.5	30.0	17.0	37.5	--	1.0	35	420	1260	12.0	28	19.5	8.0	2	PFD126K6037A
15	42.0	33.5	18.5	37.5	--	1.0	35	525	1575	11.0	28	15.1	9.5	2	PFD156K6037A
20	42.0	40.0	20.0	37.5	10.2	1.0	35	700	2100	9.0	30	10.7	12.5	4	PFD206K60374A
22	42.0	40.0	20.0	37.5	10.2	1.0	35	770	2310	8.0	30	10.3	13.5	4	PFD226K60374A
25	42.0	40.0	20.0	37.5	10.2	1.0	35	875	2625	7.0	30	8.9	15.5	4	PFD256K60374A
30	42.5	44.0	24.0	37.5	10.2	1.0	35	1050	3150	6.5	30	8.5	16.5	4	PFD306K60374A
35	41.5	45.0	30.0	37.5	20.3	1.0	35	1225	3675	6.0	30	7.3	18.5	4	PFD356K60374A
40	41.5	45.0	30.0	37.5	20.3	1.0	35	1400	4200	5.0	30	7.1	20.5	4	PFD406K60374A
55	57.5	45.0	30.0	52.5	20.3	1.2	20	1100	3300	6.2	35	8.4	17.0	4	PFD556K60524A
60	57.5	45.0	30.0	52.5	20.3	1.2	20	1200	3600	6.0	35	7.3	18.5	4	PFD606K60524A
65	57.5	50.0	35.0	52.5	20.3	1.2	20	1300	3900	5.5	35	6.8	20.0	4	PFD656K60524A
70	57.5	50.0	35.0	52.5	20.3	1.2	20	1400	4200	5.0	35	6.5	21.5	4	PFD706K60524A
75	57.5	50.0	35.0	52.5	20.3	1.2	20	1500	4500	4.5	35	6.0	23.5	4	PFD756K60524A
80	57.5	50.0	35.0	52.5	20.3	1.2	20	1600	4800	4.2	35	5.9	24.5	4	PFD806K60524A
90	58.0	55.0	45.0	52.5	20.3	1.2	20	1800	5400	4.0	35	5.5	26.0	4	PFD906K60524A
100	58.0	55.0	45.0	52.5	20.3	1.2	20	2000	6000	3.4	35	5.2	29.0	4	PFD107K60524A
110	58.0	55.0	45.0	52.5	20.3	1.2	20	2200	6600	3.0	35	5.6	30.0	4	PFD117K60524A
120	58.0	67.0	45.0	52.5	20.3	1.2	20	2400	7200	2.8	35	5.2	32.0	4	PFD127K60524A
130	58.0	67.0	45.0	52.5	20.3	1.2	20	2600	7800	2.6	35	5.3	33.0	4	PFD137K60524A

Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

MERITEK

ELECTRICAL SPECIFICATION – 700VDC (70) at 85°C

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)	I _{rms} 10KHz 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
2	32	18	9	27.5	--	0.8	65	130	390	40.0	25	44.6	2.9	2	PFD205K7027A
3	32	20	11	27.5	--	0.8	65	195	585	28.0	25	33.5	4.0	2	PFD305K7027A
4	32	20	11	27.5	--	0.8	65	260	780	23.0	25	21.6	5.5	2	PFD405K7027A
5	31	22	13	27.5	--	0.8	65	325	975	14.5	25	21.1	7.0	2	PFD505K7027A
6	32	25.5	16	27.5	--	0.8	65	390	1170	13.0	25	21.7	7.3	2	PFD605K7027A
7	32	25.5	16	27.5	--	0.8	65	455	1365	12.0	25	17.3	8.5	2	PFD705K7027A
8	32	28	14	27.5	--	0.8	65	520	1560	11.0	25	15.1	9.5	2	PFD805K7027A
9	32	30	15	27.5	--	0.8	65	585	1755	10.5	25	13.0	10.5	2	PFD905K7027A
10	32	30	15	27.5	--	0.8	65	650	1950	10.0	25	12.4	11.0	2	PFD106K7027A
12	31	33	18	27.5	--	0.8	65	780	2340	9.5	25	11.0	31.0	2	PFD126K7027A
15	32	37	22	27.5	--	0.8	65	975	2925	9.5	28	11.0	32.0	2	PFD156K7027A
15	32	37	22	27.5	10.2	0.8	65	975	2925	7.0	28	10.2	32.0	4	PFD156K70274A
18	32	37	22	27.5	--	0.8	65	1170	3510	9.0	28	10.7	32.0	2	PFD106K7027A
18	32	37	22	27.5	10.2	0.8	65	1170	3510	6.0	28	9.2	32.0	4	PFD106K70274A
10	41.5	30	17	37.5	--	1.0	35	350	1050	18.0	28	17.0	41.5	2	PFD106K7037A
12	41.5	30	17	37.5	--	1.0	35	420	1260	12.0	28	19.5	41.5	2	PFD126K7037A
15	42	33.5	18.5	37.5	--	1.0	35	525	1575	11.0	28	15.1	42.0	2	PFD156K7037A
20	42	40	20	37.5	10.2	1.0	35	700	2100	9.0	30	10.7	42.0	4	PFD206K70374A
22	42	40	20	37.5	10.2	1.0	35	770	2310	8.0	30	10.3	42.0	4	PFD226K70374A
25	42	40	20	37.5	10.2	1.0	35	875	2625	7.0	30	8.9	42.0	4	PFD256K70374A
30	42.5	44	24	37.5	10.2	1.0	35	1050	3150	6.5	30	8.5	42.5	4	PFD306K70374A
35	41.5	45	30	37.5	20.3	1.0	35	1225	3675	6.0	30	7.3	41.5	4	PFD356K70374A
40	41.5	45	30	37.5	20.3	1.0	35	1400	4200	5.0	30	7.1	41.5	4	PFD406K70374A
55	57.5	45	30	52.5	20.3	1.2	20	1100	3300	6.2	35	8.4	57.5	4	PFD556K70524A
60	57.5	45	30	52.5	20.3	1.2	20	1200	3600	6.0	35	7.3	57.5	4	PFD606K70524A
65	57.5	50	35	52.5	20.3	1.2	20	1300	3900	5.5	35	6.8	57.5	4	PFD656K70524A
70	57.5	50	35	52.5	20.3	1.2	20	1400	4200	5.0	35	6.5	57.5	4	PFD706K70524A
75	57.5	50	35	52.5	20.3	1.2	20	1500	4500	4.5	35	6.0	57.5	4	PFD756K70524A
80	57.5	50	35	52.5	20.3	1.2	20	1600	4800	4.2	35	5.9	57.5	4	PFD806K70524A
90	58	55	45	52.5	20.3	1.2	20	1800	5400	4.0	35	5.5	58.0	4	PFD906K70524A
100	58	55	45	52.5	20.3	1.2	20	2000	6000	3.4	35	5.2	58.0	4	PFD107K70524A
110	58	55	45	52.5	20.3	1.2	20	2200	6600	3.0	35	5.6	58.0	4	PFD117K70524A
120	58	67	45	52.5	20.3	1.2	20	2400	7200	2.8	35	5.2	58.0	4	PFD127K70524A
130	58	67	45	52.5	20.3	1.2	20	2600	7800	2.6	35	5.3	58.0	4	PFD137K70524A
140	58	67	45	52.5	20.3	1.2	20	2800	8400	2.5	35	5.2	58.0	4	PFD147K70524A

Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

MERITEK

ELECTRICAL SPECIFICATION – 800VDC (80) at 85°C

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)	I _{rms} 10KHz 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
2	32.0	18.0	9.0	37.5	--	0.8	65	130	390	40.0	25	44.6	2.9	2	PFD205K8037A
3	32.0	20.0	11.0	37.5	--	0.8	65	195	585	26.0	25	28.5	4.5	2	PFD305K8037A
4	31.0	25.0	14.0	37.5	--	0.8	65	260	780	22.0	25	20.3	5.8	2	PFD405K8037A
5	32.0	25.5	16.0	37.5	--	0.8	65	325	975	14.0	25	19.0	7.5	2	PFD505K8037A
6	32.0	30.0	15.0	37.5	--	0.8	65	390	1170	12.0	25	17.3	8.5	2	PFD605K8037A
7	32.0	30.0	15.0	37.5	--	0.8	65	455	1365	11.0	25	15.1	9.5	2	PFD705K8037A
8	31.0	33.0	18.0	37.5	--	0.8	65	520	1560	10.5	25	13.0	10.5	2	PFD805K8037A
9	31.0	33.0	18.0	37.5	--	0.8	65	585	1755	10.2	25	11.1	11.5	2	PFD905K8037A
10	32.0	37.0	22.0	37.5	--	0.8	65	650	1950	9.5	25	11.0	12.0	2	PFD106K8037A
10	32.0	37.0	22.0	37.5	10.2	0.8	65	650	1950	8.5	25	9.0	14.0	4	PFD106K80374A
12	32.0	37.0	22.0	37.5	--	0.8	65	780	2340	9.5	25	11.0	12.0	2	PFD126K8037A
12	32.0	37.0	22.0	37.5	10.2	0.8	65	780	2340	8.0	25	8.3	15.0	4	PFD126K80374A
14	32.0	37.0	22.0	37.5	--	0.8	65	910	3730	9.5	25	11.0	12.0	2	PFD146K8037A
14	32.0	37.0	22.0	37.5	10.2	0.8	65	910	3730	7.5	25	7.8	16.0	4	PFD146K80374A
8	41.5	30.0	17.0	37.5	--	1.0	35	280	840	22.5	28	22.0	5.5	2	PFD805K8037A
9	41.5	30.0	17.0	37.5	--	1.0	35	315	945	21.5	28	19.4	6.0	2	PFD905K8037A
10	42.0	33.5	18.5	37.5	--	1.0	35	350	1050	18.0	28	17.0	7.0	2	PFD106K8037A
12	42.0	33.5	18.5	37.5	--	1.0	35	420	1260	12.0	28	19.5	8.0	2	PFD126K8037A
14	42.0	33.5	18.5	37.5	--	1.0	35	490	1470	11.0	28	15.1	9.5	2	PFD146K8037A
15	42.0	40.0	20.0	37.5	10.2	1.0	35	525	1575	9.0	30	10.7	12.5	4	PFD156K80374A
20	42.5	44.0	24.0	37.5	10.2	1.0	35	700	2100	8.0	30	10.3	13.5	4	PFD206K80374A
25	42.5	44.0	24.0	37.5	10.2	1.0	35	875	2625	6.5	30	8.5	16.5	4	PFD256K80374A
30	41.5	45.0	30.0	37.5	20.3	1.0	35	1050	3150	5.8	30	6.5	20.0	4	PFD306K80374A
40	57.5	45.0	30.0	52.5	20.3	1.2	20	800	2400	8.5	35	9.0	14.0	4	PFD406K80524A
45	57.5	45.0	30.0	52.5	20.3	1.2	20	900	3700	7.0	35	8.9	15.5	4	PFD456K80524A
50	57.5	50.0	35.0	52.5	20.3	1.2	20	1000	3000	5.8	35	8.9	17.0	4	PFD506K80524A
55	57.5	50.0	35.0	52.5	20.3	1.2	20	1100	3300	5.5	35	7.6	19.0	4	PFD556K80524A
60	57.5	50.0	35.0	52.5	20.3	1.2	20	1200	3600	4.8	35	7.1	21.0	4	PFD606K80524A
65	58.0	55.0	45.0	52.5	20.3	1.2	20	1300	3900	4.6	35	6.4	22.5	4	PFD656K80524A
70	58.0	55.0	45.0	52.5	20.3	1.2	20	1400	4200	4.5	35	5.8	24.0	4	PFD706K80524A
75	58.0	55.0	45.0	52.5	20.3	1.2	20	1500	4500	4.3	35	5.4	25.5	4	PFD756K80524A
80	58.0	55.0	45.0	52.5	20.3	1.2	20	1600	4800	4.2	35	5.3	26.0	4	PFD806K80524A
90	58.0	55.0	45.0	52.5	20.3	1.2	20	1800	5400	4.0	35	5.0	37.5	4	PFD906K80524A
100	58.0	67.0	45.0	52.5	20.3	1.2	20	2000	6000	3.2	35	4.7	31.5	4	PFD107K80524A
110	58.0	67.0	45.0	52.5	20.3	1.2	20	2200	6600	3.0	35	4.3	34.0	4	PFD117K80524A

Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

MERITEK

ELECTRICAL SPECIFICATION – 900VDC (90) at 85°C

CAP (μ F)	Dimensions (mm)						dv/dt (V/ μ s)	Peak Current (A)	Surge Current (A)	ESR 10KHz (m Ω)	ESL (nH)	Thermal Rth (°C/W)	I _{rms} 10KHz 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
1	32.0	18.0	9.0	37.5	--	0.8	70	70	210	65.0	25	57.7	2.0	2	PFD105K9027A
2	32.0	20.0	11.0	37.5	--	0.8	70	140	420	38.0	25	38.5	3.2	2	PFD205K9027A
3	31.0	22.0	13.0	37.5	--	0.8	70	210	630	30.0	25	21.7	4.8	2	PFD305K9027A
4	32.0	25.5	16.0	37.5	--	0.8	70	280	840	20.5	25	20.3	6.0	2	PFD405K9027A
5	32.0	30.0	15.0	37.5	--	0.8	70	350	1050	12.0	25	22.2	7.5	2	PFD505K9027A
6	31.0	33.0	18.0	37.5	--	0.8	70	420	1260	11.5	25	21.4	7.8	2	PFD605K9027A
7	31.0	33.0	18.0	37.5	--	0.8	70	490	1470	10.2	25	13.3	10.5	2	PFD705K9027A
8	32.0	37.0	22.0	37.5	--	0.8	70	560	1680	9.5	25	11.9	11.5	2	PFD705K9027A
8	32.0	37.0	22.0	37.5	10.2	0.8	70	560	1680	9.0	25	10.7	12.5	4	PFD805K90274A
9	32.0	37.0	22.0	37.5	--	0.8	70	630	1890	9.7	25	11.1	11.8	2	PFD905K9027A
9	32.0	37.0	22.0	37.5	10.2	0.8	70	630	1890	7.8	25	9.8	14.0	4	PFD905K90274A
10	32.0	37.0	22.0	37.5	--	0.8	70	700	2100	9.5	25	11.0	12.0	2	PFD106K9027A
10	32.0	37.0	22.0	37.5	10.2	0.8	70	700	2100	7.2	25	8.7	15.5	4	PFD106K90274A
5	41.5	30.0	17.0	37.5	--	1.0	35	175	525	28.0	28	37.1	3.8	2	PFD505K9037A
6	41.5	30.0	17.0	37.5	--	1.0	35	210	630	25.0	28	29.6	4.5	2	PFD605K9037A
7	41.5	30.0	17.0	37.5	--	1.0	35	245	735	22.0	28	37.3	5.0	2	PFD705K9037A
8	42.0	33.5	18.5	37.5	--	1.0	35	280	840	19.5	28	21.4	6.0	2	PFD805K9037A
10	42.0	40.0	20.0	37.5	10.2	1.0	35	350	1050	13.0	30	20.5	7.5	4	PFD106K90374A
12	42.5	37.0	22.0	37.5	10.2	1.0	35	420	1260	11.5	30	16.1	9.0	4	PFD126K90374A
15	42.5	44.0	24.0	37.5	10.2	1.0	35	525	1575	10.5	30	13.0	10.5	4	PFD156K90374A
18	42.5	44.0	24.0	37.5	10.2	1.0	35	630	1890	8.8	30	10.1	13.0	4	PFD186K90374A
20	42.5	44.0	24.0	37.5	10.2	1.0	35	700	2100	7.5	30	9.5	14.5	4	PFD206K90374A
25	41.5	45.0	30.0	37.5	20.3	1.0	35	875	2625	6.2	30	7.9	17.5	4	PFD256K90374A
30	57.5	45.0	30.0	52.5	20.3	1.2	20	600	1800	10.0	35	12.4	11.0	4	PFD306K90524A
35	57.5	45.0	30.0	52.5	20.3	1.2	20	700	2100	9.0	35	10.7	12.5	4	PFD356K90524A
40	57.5	50.0	35.0	52.5	20.3	1.2	20	800	2400	7.5	35	9.5	14.5	4	PFD406K90524A
45	57.5	50.0	35.0	52.5	20.3	1.2	20	900	3700	6.8	35	8.6	16.0	4	PFD456K90524A
50	57.5	50.0	35.0	52.5	20.3	1.2	20	1000	3000	6.4	35	7.2	18.0	4	PFD506K90524A
55	58.0	55.0	45.0	52.5	20.3	1.2	20	1100	3300	5.6	35	6.7	20.0	4	PFD556K90524A
60	58.0	55.0	45.0	52.5	20.3	1.2	20	1200	3600	4.8	35	6.8	21.5	4	PFD606K90524A
65	58.0	55.0	45.0	52.5	20.3	1.2	20	1300	3900	4.5	35	6.3	23.0	4	PFD656K90524A
70	58.0	67.0	45.0	52.5	20.3	1.2	20	1400	4200	4.0	35	6.0	25.0	4	PFD706K90524A
75	58.0	67.0	45.0	52.5	20.3	1.2	20	1500	4500	3.9	35	5.9	25.5	4	PFD756K90524A
80	58.0	67.0	45.0	52.5	20.3	1.2	20	1600	4800	3.8	35	5.6	26.5	4	PFD806K90524A
85	58.0	67.0	45.0	52.5	20.3	1.2	20	1700	5100	3.6	35	5.1	28.5	4	PFD856K90524A

Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

MERITEK

ELECTRICAL SPECIFICATION – 1000VDC (3A) at 85°C

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)	I _{rms} 10KHz 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
1	32.0	18.0	9.0	37.5	--	0.8	75	75	225	65.0	25	57.7	2.0	2	PFD105K3A27A
2	31.0	22.0	13.0	37.5	--	0.8	75	150	450	38.0	25	32.2	3.5	2	PFD205K3A27A
3	32.0	25.5	16.0	37.5	--	0.8	75	225	675	22.0	25	37.3	5.0	2	PFD305K3A27A
4	32.0	30.0	15.0	37.5	--	0.8	75	300	900	16.5	25	18.6	7.0	2	PFD405K3A27A
5	31.0	33.0	18.0	37.5	--	0.8	75	375	1125	12.5	25	16.6	8.5	2	PFD505K3A27A
6	31.0	33.0	18.0	37.5	--	0.8	75	450	1350	11.5	25	16.1	9.0	2	PFD605K3A27A
7	32.0	37.0	22.0	37.5	--	0.8	75	525	1575	11.0	25	15.1	9.5	2	PFD705K3A27A
7	32.0	37.0	22.0	37.5	10.2	0.8	75	525	1575	9.8	25	11.6	11.5	4	PFD705K3A274A
8	32.0	37.0	22.0	37.5	--	0.8	75	600	1800	10.5	25	13.0	10.5	2	PFD805K3A27A
8	32.0	37.0	22.0	37.5	10.2	0.8	75	600	1800	8.8	25	10.1	13.0	4	PFD805K3A274A
5	41.5	30.0	17.0	37.5	--	1.0	35	175	525	28.0	28	37.1	3.8	2	PFD505K3A37A
6	41.5	30.0	17.0	37.5	--	1.0	35	210	630	25.0	28	29.6	4.5	2	PFD605K3A37A
7	41.5	30.0	17.0	37.5	--	1.0	35	245	735	22.0	28	37.3	5.0	2	PFD705K3A37A
8	42.0	33.5	18.5	37.5	--	1.0	35	280	840	19.5	28	21.4	6.0	2	PFD805K3A37A
10	42.0	40.0	20.0	37.5	10.2	1.0	35	350	1050	13.0	30	20.5	7.5	4	PFD106K3A374A
12	42.5	37.0	22.0	37.5	10.2	1.0	35	420	1260	11.5	30	16.1	9.0	4	PFD126K3A374A
15	42.5	44.0	24.0	37.5	10.2	1.0	35	525	1575	10.0	30	11.3	11.5	4	PFD156K3A374A
18	41.5	45.0	30.0	37.5	20.3	1.0	35	630	1890	7.8	30	9.8	14.0	4	PFD186K3A374A
20	41.5	45.0	30.0	37.5	20.3	1.0	35	700	2100	7.0	30	8.9	15.5	4	PFD206K3A374A
30	57.5	45.0	30.0	52.5	20.3	1.2	20	600	1800	9.8	35	11.6	11.5	4	PFD306K3A524A
35	57.5	45.0	30.0	52.5	20.3	1.2	20	700	2100	8.0	35	10.3	13.5	4	PFD356K3A524A
40	57.5	50.0	35.0	52.5	20.3	1.2	20	800	2400	7.0	35	8.9	15.5	4	PFD406K3A524A
45	58.0	55.0	45.0	52.5	20.3	1.2	20	900	3700	6.2	35	7.9	17.5	4	PFD456K3A524A
50	58.0	55.0	45.0	52.5	20.3	1.2	20	1000	3000	5.8	35	6.8	19.5	4	PFD506K3A524A
55	58.0	55.0	45.0	52.5	20.3	1.2	20	1100	3300	5.0	35	6.8	21.0	4	PFD556K3A524A
60	58.0	67.0	45.0	52.5	20.3	1.2	20	1200	3600	4.6	35	6.2	23.0	4	PFD606K3A524A
65	58.0	67.0	45.0	52.5	20.3	1.2	20	1300	3900	4.2	35	5.7	25.0	4	PFD656K3A524A
70	58.0	67.0	45.0	52.5	20.3	1.2	20	1400	4200	3.8	35	5.4	37.0	4	PFD706K3A524A

Metalized PP Film Capacitor DC-Link AEC-Q200

PFD-A series

MERITEK

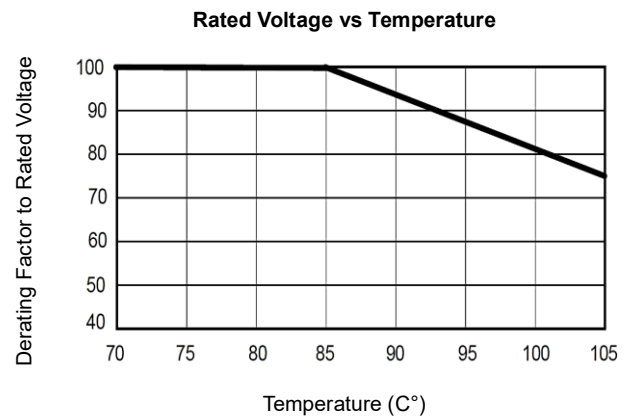
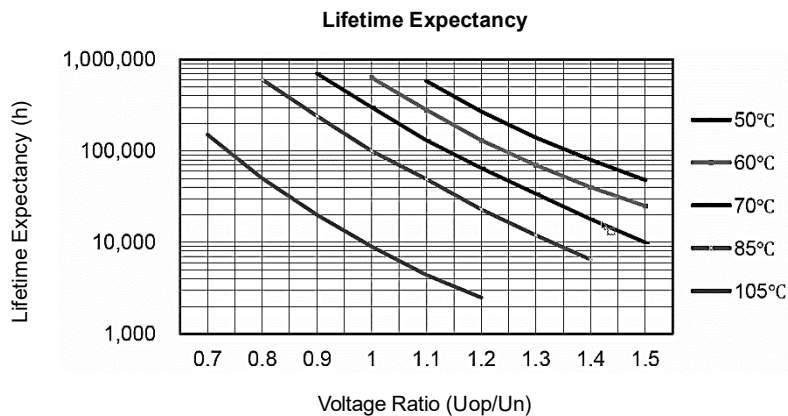
ELECTRICAL SPECIFICATION – 1100VDC (3Q) at 85°C

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)	I _{rms} 10KHz 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
1	32.0	20.0	11.0	37.5	--	0.8	80	80	240	65.0	25	47.7	2.2	2	PFD105K3Q27A
1.5	31.0	22.0	13.0	37.5	--	0.8	80	120	360	46.0	25	52.2	2.5	2	PFD155K3Q27A
2	31.0	25.0	14.0	37.5	--	0.8	80	160	480	24.5	25	26.6	4.8	2	PFD205K3Q27A
3	32.0	30.0	15.0	37.5	--	0.8	80	240	720	18.5	25	19.2	6.5	2	PFD305K3Q27A
4	31.0	33.0	18.0	37.5	--	0.8	80	320	960	12.5	25	16.6	8.5	2	PFD405K3Q27A
5	32.0	37.0	22.0	37.5	--	0.8	80	400	1200	10.8	25	14.5	9.8	2	PFD505K3Q27A
5	32.0	37.0	22.0	37.5	10.2	0.8	80	400	1200	10.5	25	13.0	10.5	4	PFD505K3Q274A
6	32.0	37.0	22.0	37.5	--	0.8	80	480	1440	10.5	25	13.0	10.5	2	PFD605K3Q27A
6	32.0	37.0	22.0	37.5	10.2	0.8	80	480	1440	8.8	25	10.1	13.0	4	PFD605K3Q274A
3	41.5	30.0	17.0	37.5	--	1.0	40	120	360	46.0	28	52.2	2.5	2	PFD305K3Q37A
4	41.5	30.0	17.0	37.5	--	1.0	40	160	480	32.5	28	37.7	3.5	2	PFD405K3Q37A
4.7	42.0	33.5	18.5	37.5	--	1.0	40	188	564	28.0	28	33.5	4.0	2	PFD475K3Q37A
5	42.0	33.5	18.5	37.5	--	1.0	40	200	600	26.0	28	32.7	4.2	2	PFD505K3Q37A
6	42.0	33.5	18.5	37.5	--	1.0	40	240	720	23.5	28	25.5	5.0	2	PFD605K3Q37A
7	42.0	40.0	20.0	37.5	10.2	1.0	40	280	840	18.5	30	22.5	6.0	4	PFD705K3Q374A
8	42.5	37.0	22.0	37.5	10.2	1.0	40	320	960	16.5	30	21.5	6.5	4	PFD805K3Q374A
9	42.5	37.0	22.0	37.5	10.2	1.0	40	360	1080	13.0	30	20.5	7.5	4	PFD905K3Q374A
10	42.5	44.0	24.0	37.5	10.2	1.0	40	400	1200	12.0	30	17.3	8.5	4	PFD106K3Q374A
12	42.5	44.0	24.0	37.5	10.2	1.0	40	480	1440	10.8	30	13.9	10.0	4	PFD126K3Q374A
14	41.5	45.0	30.0	37.5	20.3	1.0	40	560	1680	9.5	30	11.0	12.0	4	PFD146K3Q374A
15	41.5	45.0	30.0	37.5	20.3	1.0	40	600	1800	8.5	30	10.4	13.0	4	PFD156K3Q374A
20	57.5	45.0	30.0	52.5	20.3	1.2	20	400	1200	11.5	35	16.1	9.0	4	PFD206K3Q524A
25	57.5	50.0	35.0	52.5	20.3	1.2	20	500	1500	10.0	35	12.4	11.0	4	PFD256K3Q524A
30	57.5	50.0	35.0	52.5	20.3	1.2	20	600	1800	8.6	35	10.3	13.0	4	PFD306K3Q524A
35	58.0	55.0	45.0	52.5	20.3	1.2	20	700	2100	7.5	35	9.5	14.5	4	PFD356K3Q524A
40	58.0	55.0	45.0	52.5	20.3	1.2	20	800	2400	6.8	35	8.6	16.0	4	PFD406K3Q524A
45	58.0	55.0	45.0	52.5	20.3	1.2	20	900	3700	6.2	35	7.9	17.5	4	PFD456K3Q524A
50	58.0	67.0	45.0	52.5	20.3	1.2	20	1000	3000	5.6	35	7	19.5	4	PFD506K3Q524A
55	58.0	67.0	45.0	52.5	20.3	1.2	20	1100	3300	4.8	35	6.8	21.5	4	PFD556K3Q524A

ELECTRICAL SPECIFICATION – 1200VDC (3L) at 85°C

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 70°C (A)	No of Pin	Part Number
	W	H	T	P	P1	d									
1	32.0	20.0	11.0	37.5	--	0.8	90	90	370	35.0	25	35.0	3.5	2	PFD105K3L27A
2	32.0	25.5	16.0	37.5	--	0.8	90	180	540	24.0	25	25.0	5.0	2	PFD205K3L27A
3	32.0	30.0	15.0	37.5	--	0.8	90	370	810	13.0	25	20.5	7.5	2	PFD305K3L27A
4	31.0	33.0	18.0	37.5	--	0.8	90	360	1080	11.0	25	15.1	9.5	2	PFD405K3L27A
5	32.0	37.0	22.0	37.5	--	0.8	90	450	1350	10.5	25	13.0	10.5	2	PFD505K3L27A
5	32.0	37.0	22.0	37.5	10.2	0.8	90	450	1350	9.5	25	11.0	12.0	4	PFD505K3L274A
3	41.5	30.0	17.0	37.5	--	1.0	45	135	405	35.0	28	41.9	3.2	2	PFD305K3L37A
4	41.5	30.0	17.0	37.5	--	1.0	45	180	540	28.0	28	30.4	4.2	2	PFD405K3L37A
5	42.0	33.5	18.5	37.5	--	1.0	45	225	675	21.5	28	23.1	5.5	2	PFD505K3L37A
6	42.0	40.0	20.0	37.5	10.2	1.0	45	370	810	16.5	30	21.5	6.5	4	PFD605K3L374A
7	42.5	37.0	22.0	37.5	10.2	1.0	45	315	945	13.0	30	20.5	7.5	4	PFD705K3L374A
8	42.5	44.0	24.0	37.5	10.2	1.0	45	360	1080	12.0	30	17.3	8.5	4	PFD805K3L374A
9	42.5	44.0	24.0	37.5	10.2	1.0	45	405	1215	10.8	30	13.9	10.0	4	PFD905K3L374A
10	42.5	44.0	24.0	37.5	10.2	1.0	45	450	1350	10.0	30	12.4	11.0	4	PFD106K3L374A
12	41.5	45.0	30.0	37.5	20.3	1.0	45	540	1620	8.5	30	10.4	13.0	4	PFD126K3L374A
20	57.5	45.0	30.0	52.5	20.3	1.2	25	500	1500	10.0	35	12.4	11.0	4	PFD206K3L524A
25	57.5	50.0	35.0	52.5	20.3	1.2	25	625	1875	8.6	35	10.3	13.0	4	PFD256K3L524A
30	58.0	55.0	45.0	52.5	20.3	1.2	25	750	2250	7.5	35	9.5	14.5	4	PFD306K3L524A
35	58.0	55.0	45.0	52.5	20.3	1.2	25	875	2625	6.8	35	8.6	16.0	4	PFD356K3L524A
40	58.0	67.0	45.0	52.5	20.3	1.2	25	1000	3000	5.5	35	6.8	20.0	4	PFD406K3L524A
45	58.0	67.0	45.0	52.5	20.3	1.2	25	1125	3375	4.8	35	6.2	22.5	4	PFD456K3L524A

CHARACTERISTIC CURVE



RELIABILITY TEST CONDITON AND REQUIREMENT

Item	Conditions	Requirement
Solderability	Soldering Temperature: 245 ±5 °C Immersion duration: 2±0.5sec	More than 90% of coverage
Soldering Heat Resistance	Preheat Temperature 100°C~120°C for 100sec max Soldering Temperature: +260±5°C Immersion Duration: ≤10 sec Immersion Depth: 1.5 ±0.5mm from roots.	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±2% of initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value
Terminal Strength, Tensile	Load force: 1.0kg(10N), Holding time: 10±2sec,	Shall be no abnormality
Terminal Strength, Bending	Load force: 0.5kg(5N), for 2 cycles Bending condition: 90° in 2-3 sec	Shall be no abnormality
Dry Heat Resistance	Temperature: 105±2°C Duration: 16-0/+1hrs	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±3% of initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value
Cold Resistance	Temperature: -40±2°C Duration: 2-0/+1hrs	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±3% of initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value
Humidity Resistance	Temperature: 40±2°C Relative humidity: 90%~95% RH Duration: 1344 -0/+24hrs	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±5% initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value
High Temperature Loading	Temperature: 85±2°C Apply 1.3 times of rated voltage for 1,000+24hr Duration: 500hrs,1000 charges and discharges At 1.3 * I peak (maximum respective peak current in continuous operation)	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±5% of initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value
Rapid Temperature Change	Temperature Cycle: 5 Cycles High Temperature: 105±5°C Low Temperature: -40±5°C 30min±10% for each temperature	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±5% of initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value
BUMP	Pulse shape: half sine Acceleration: 490 m/s ² Duration of pulse: 11 ms	Appearance: no visible damage Capacitance Chang (ΔC/C): ≤ ±2% of initial value DF (tanδ): ≤50*10 ⁻⁴ (1KHz) Insulation resistance: ≥ 50% of initial value

Notes:

1. Ambient Temp: 15°C to 35°C, Relative Humidity (R.H.): 45% to 75%, Air Pressure: 86kpa to 106kpa
2. A 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

*Specifications subject to change without notice.