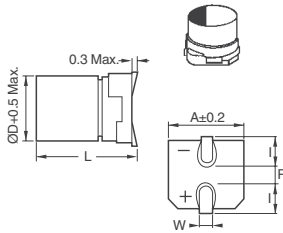


Panasonic **FK Series** Aluminum Electrolytic Capacitors, Surface Mount Type (Cont.)



Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ Spec. Values (120Hz, +20°C)	Impedance (Ω)	Max. Leakage Current (µA)	Size Code	Max. Ripple Cur. 100KHz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Panasonic Part No.
								1	50	100		Qty.	Pricing	
63	4.7	0.08	3.00	3.0	C	50	PCE3478CT-ND	.64	19.20	33.61	PCE3478TR-ND	1,000	136.02	EEV-FK1J47R7
	10	0.08	1.50	6.3	D	80	PCE3479CT-ND	.75	22.62	39.59	PCE3479TR-ND	1,000	160.24	EEV-FK1J100P
	22	0.08	1.20	13.9	D8	120	PCE3524CT-ND	1.03	30.84	53.96	PCE3524TR-ND	900	208.15	EEV-FK1J220P
	22	0.08	1.20	13.9	E	120	PCE3480CT-ND	.97	30.86	55.55	PCE3480TR-ND	1,000	246.88	EEV-FK1J220P
	33	0.08	0.65	20.8	F	250	PCE3481CT-ND	1.25	39.97	71.95	PCE3481TR-ND	500	189.87	EEV-FK1J330P
	47	0.08	0.65	29.6	F	250	PCE3482CT-ND	1.25	39.97	71.95	PCE3482TR-ND	500	189.87	EEV-FK1J470P
80	4.7	0.08	3.00	3.0	C	400	PCE3483CT-ND	1.31	44.49	80.80	PCE3483TR-ND	500	210.97	EEV-FK1J680P
	10	0.08	5.00	3.0	C	25	PCE3487CT-ND	.64	19.20	33.61	PCE3487TR-ND	1,000	136.02	EEV-FK1K3R3R
	4.7	0.08	3.00	3.8	D	40	PCE3488CT-ND	.75	22.62	39.59	PCE3488TR-ND	1,000	160.24	EEV-FK1K4R7P
	10	0.08	2.40	8.0	D8	60	PCE3527CT-ND	1.03	30.84	53.96	PCE3527TR-ND	900	208.15	EEV-FK1K100XP
	10	0.08	2.40	8.0	E	60	PCE3489CT-ND	.97	30.86	55.55	PCE3489TR-ND	1,000	246.88	EEV-FK1K100P
	22	0.08	1.30	17.6	F	130	PCE3490CT-ND	1.25	39.97	71.95	PCE3490TR-ND	500	189.87	EEV-FK1K220P
	33	0.08	1.30	26.4	F	130	PCE3491CT-ND	1.25	39.97	71.95	PCE3491TR-ND	500	189.87	EEV-FK1K330P
	47	0.08	0.70	37.6	G	200	PCE3492CT-ND	1.31	44.49	80.80	PCE3492TR-ND	500	210.78	EEV-FK1K470P
	22	0.07	1.30	22.0	F	130	PCE3502CT-ND	1.23	39.43	70.98	PCE3502TR-ND	500	187.31	EEV-FK2A230P
	33	0.07	0.70	33.0	G	200	PCE3503CT-ND	1.29	43.58	79.13	PCE3503TR-ND	500	206.43	EEV-FK2A330P

Panasonic **FP Series** Aluminum Electrolytic Capacitors, Surface Mount Type — High Temperature Reflow (260°C)



Specifications: • Operating Temperature Range: -55°C ~ 105°C • Capacitance Tolerance: ±20% (120Hz, 20°C) • Leakage Current: I ≤ 0.01CV or 3 (µA) whichever is greater after a 2 minute application of rated working voltage at 20°C • Low Temperature Characteristics: Impedance ratio (120Hz)

Soldering: Reflow (I.R or I.R + Heated Air. VPS is not allowed)

Can Size - mm (Size Code)	Peak Temperature	Duration (Temp. ≥255°C)	Duration (Temp. ≥230°C)	Reflow Frequency
ø4 ~ ø6.3, ø8 x 10.2 (B, C, D, D8, F)	260°C	5 seconds	60 seconds	2±
ø8 x 6.2, ø10 x 10.2 (E, G)	260°C	5 seconds	60 seconds	1

† Capacitor must return to room temperature before the second reflow

Following Specified Values:

Impedance 120Hz	Rated Working Voltage				
	6.3V	10V	16V	25V	35V
-25°C / 20°C	2	2	2	3	2
-40°C / 20°C	3	3	3	3	3
-55°C / 20°C	4	4	4	3	3

Size Code	Dimensions - mm					
	øD	L	A	I	W	P
B	4.0	5.8	4.3	1.8	0.65 ±0.1	1.0
C	5.0	5.8	5.3	2.2	0.65 ±0.1	1.5
D	6.3	5.8	6.6	2.6	0.65 ±0.1	1.8
D8	6.3	7.7	6.6	2.6	0.65 ±0.1	1.8
E	8.0	6.2	8.3	3.4	0.65 ±0.1	2.2
F	8.0	10.2	8.3	3.4	0.90 ±0.2	3.1
G	10.0	10.2	10.3	3.5	0.90 ±0.2	4.6

F

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ Spec. Values (120Hz, 20°C)	ESR (Ω)	Max. Leakage Current (µA)	Size Code	Max. Ripple Current 100KHz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Panasonic Part No.
								1	50	100		Qty.	Pricing	
6.3	22	0.26	0.85	3.0	B	160	PCE45100CT-ND	.74	21.14	35.24	PCE4510TR-ND	2,000	125.68M	EEE-FPQJ220AR
	24	0.26	0.85	3.0	C	240	PCE4511CT-ND	.67	20.14	35.26	PCE4511TR-ND	1,000	141.39	EEE-FPQJ470AR
	22	0.26	0.85	3.0	B	160	PCE4512CT-ND	.77	22.22	37.03	PCE4512TR-ND	2,000	131.30M	EEE-FPJ470UAR
	100	0.26	0.26	6.3	D	300	PCE4513CT-ND	.80	23.78	41.62	PCE4513TR-ND	1,000	166.08	EEE-FPQJ101AP
	100	0.26	0.36	6.3	C	240	PCE4514CT-ND	.71	21.25	37.19	PCE4514TR-ND	1,000	148.13	EEE-FPJ101UAR
	220	0.26	0.26	13.8	D	300	PCE4515CT-ND	.80	23.78	41.62	PCE4515TR-ND	1,000	166.08	EEE-FPQJ221AP
	330	0.26	0.18	20.7	E	500	PCE4516CT-ND	1.01	32.41	58.33	PCE4516TR-ND	1,000	255.85	EEE-FPQJ331AP
	330	0.26	0.16	20.7	D8	600	PCE4517CT-ND	1.08	32.43	56.75	PCE4517TR-ND	900	216.13	EEE-FPJ331XAP
	470	0.26	0.08	29.6	F	850	PCE4518CT-ND	1.18	39.92	72.47	PCE4518TR-ND	500	186.28	EEE-FPQJ471AP
	1000	0.26	0.08	63.0	F	850	PCE4430CT-ND	1.18	39.66	72.01	PCE4430TR-ND	500	184.60	EEE-FPQJ102AP
10	1500	0.26	0.06	94.5	G	1190	PCE4431CT-ND	1.38	46.46	84.36	PCE4431TR-ND	500	216.02	EEE-FPQJ152AP
	1800	0.26	0.08	113.4	G	850	PCE4432CT-ND	1.51	51.13	92.84	PCE4432TR-ND	500	237.90	EEE-FPJ182UAR
	22	0.19	0.85	3.0	B	160	PCE4519CT-ND	.74	21.14	35.24	PCE4519TR-ND	2,000	125.68M	EEE-FPJ1A220AR
	33	0.19	0.36	3.3	C	240	PCE4520CT-ND	.67	20.14	35.26	PCE4520TR-ND	1,000	141.39	EEE-FPJ1A330AR
	33	0.19	0.85	3.3	B	160	PCE4521CT-ND	.77	22.22	37.03	PCE4521TR-ND	2,000	131.30M	EEE-FPJ330UAR
	150	0.19	0.26	15.0	D	300	PCE4522CT-ND	.80	23.78	41.62	PCE4522TR-ND	1,000	166.08	EEE-FPJ1A51AP
	220	0.19	0.18	22.0	E	500	PCE4523CT-ND	1.01	32.41	58.33	PCE4523TR-ND	1,000	255.85	EEE-FPJ1A221AP
	220	0.19	0.16	22.0	D8	600	PCE4524CT-ND	1.08	32.43	56.75	PCE4524TR-ND	900	216.13	EEE-FPJ221XAP
	330	0.19	0.08	33.0	F	850	PCE4525CT-ND	1.18	39.92	72.47	PCE4525TR-ND	500	186.28	EEE-FPJ1A331AP
	470	0.19	0.08	47.0	F	850	PCE4526CT-ND	1.18	39.92	72.47	PCE4526TR-ND	500	186.28	EEE-FPJ1A471AP
16	680	0.19	0.08	68.0	F	850	PCE4433CT-ND	1.18	39.66	72.01	PCE4433TR-ND	500	184.60	EEE-FPJ1A681AP
	1000	0.19	0.06	100.0	G	1190	PCE4434CT-ND	1.38	46.46	84.36	PCE4434TR-ND	500	216.02	EEE-FPJ1A102AP
	1200	0.19	0.08	120.0	G	850	PCE4435CT-ND	1.51	51.13	92.84	PCE4435TR-ND	500	237.90	EEE-FPJ1A221AP
	10	0.16	0.85	3.0	B	160	PCE4527CT-ND	.74	21.14	35.24	PCE4527TR-ND	2,000	125.68M	EEE-FPJ1C100AR
	22	0.16	0.36	3.5	C	240	PCE4528CT-ND	.67	20.14	35.26	PCE4528TR-ND	1,000	141.39	EEE-FPJ1C220AR
	22	0.16	0.85	3.5	B	160	PCE4529CT-ND	.77	22.22	37.03	PCE4529TR-ND	2,000	131.30M	EEE-FPJ220UAR
	47	0.16	0.26	7.5	D	300	PCE4530CT-ND	.80	23.78	41.62	PCE4530TR-ND	1,000	166.08	EEE-FPJ1C470AP
	47	0.16	0.36	7.5	C	240	PCE4531CT-ND	.71	21.25	37.19	PCE4531TR-ND	1,000	148.13	EEE-FPJ470UAR
	68	0.16	0.26	10.8	D	300	PCE4532CT-ND	.80	23.78	41.62	PCE4532TR-ND	1,000	166.08	EEE-FPJ1C680AP
	100	0.16	0.26	16.0	D	300	PCE4533CT-ND	.80	23.78	41.62	PCE4533TR-ND	1,000	166.08	EEE-FPJ1C101AP
25	100	0.16	0.16	16.0	D8	600	PCE4534CT-ND	1.08	32.43	56.75	PCE4534TR-ND	900	216.13	EEE-FPJ101XAP
	150	0.16	0.16	24.0	D8	600	PCE4535CT-ND	1.08	32.43	56.75	PCE4535TR-ND	900	216.13	EEE-FPJ151XAP
	220	0.16	0.18	35.2	E	600	PCE4536CT-ND	1.01	32.41	58.33	PCE4536TR-ND	1,000	255.85	EEE-FPJ221AP
	220	0.16	0.36	36.2	D8	600	PCE4537CT-ND	1.08	32.43	56.75	PCE4537TR-ND	900	216.13	EEE-FPJ221XAP
	330	0.16	0.08	52.8	F	850	PCE4538CT-ND	1.18	39.92	72.47	PCE4538TR-ND	500	186.28	EEE-FPJ1C331AP
	470	0.16	0.08	75.2	F	850	PCE4436CT-ND	1.18	39.66	72.01	PCE4436TR-ND	500	184.60	EEE-FPJ1C471AP
	680	0.16	0.06	108.8	G	1190	PCE4437CT-ND	1.38	46.46	84.36	PCE4437TR-ND	500	216.02	EEE-FPJ1C681AP
	820	0.16	0.08	131.2	G	850	PCE4438CT-ND	1.51	51.13	92.84	PCE4438TR-ND	500	237.90	EEE-FPJ221UAR
	10	0.14	0.85	3.0	B	160	PCE4539CT-ND	.74	21.14	35.24	PCE4539TR-ND	2,000	125.68M	EEE-FPJ1E100AR
	22	0.14	0.36	5.5	C	240	PCE4540CT-ND	.67	20.14	35.26	PCE4540TR-ND	1,000	141.39	EEE-FPJ1E220AR
33	0.14	0.26	8.2	D	300	PCE4541CT-ND	.80	23.78	41.62	PCE4541TR-ND	1,000	166.08	EEE-FPJ1E330AP	
33	0.14	0.36	8.2	C	240	PCE4542CT-ND	.71	21.25	37.19	PCE4542TR-ND	1,000	148.13	EEE-FPJ330UAR	
47	0.14	0.26	11.7	D	300	PCE4543CT-ND	.80	23.78	41.62	PCE4543TR-ND	1,000	166.08	EEE-FPJ1E470AP	
35	68	0.14	0.26	17.0	D	300	PCE4544CT-ND	.80	23.78	41.62	PCE4544TR-ND	1,000	166.08	EEE-FPJ1E680AP
	100	0.14	0.18	25.0	E	500	PCE4545CT-ND	1.01	32.41	58.33	PCE4545TR-ND	1,000	255.85	EEE-FPJ1E101AP
	100	0.14	0.16	25.0	D8	600	PCE4546CT-ND	1.08	32.43	56.75	PCE4546TR-ND	900	216.13	EEE-FPJ101XAP
	150	0.14	0.08	37.5	F	850	PCE45							