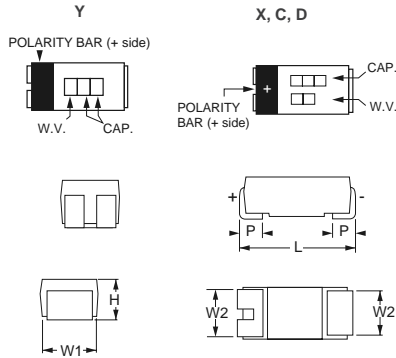


Panasonic® TE Series Tantalum Electrolytic Chip Capacitors



Dimensions (mm)

EIA Size	Size Code	L ± 0.2	W ₁ ± 0.2	W ₂ ± 0.1	H ± 0.2	P ± 0.3
A	Y	3.2	1.6	1.2	1.6	0.8
B	X	3.5	2.8	2.2	1.9	0.8
C	C	6.0	3.2	2.2	2.5	1.3
D	D	7.3	4.3	3.65	2.8	1.3

Packing Quantity	Size Y, X	2,000 pieces/reel
	Size C, D	750 pieces/reel

Features

- Wide capacitance range • High performance in temperature and frequency characteristics • Excellent solderability • Excellent terminal construction against bending of P.W.B • Low inductance structure.

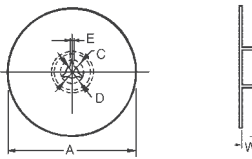
Specifications

- **Operating Temp. Range:** -55 to +125°C • **Capacitance Tolerance:** ±20% at 120Hz, +20°C • **DC Leakage Current:** I = 0.01CV or 0.5μA max. whichever is greater DC leakage current shall be measured after 2 minutes application or rated working voltage at +20°C • **tan δ:** ≤3.3μF - 0.04 max.; 4.7 - 68μF - 0.06 max.; 100μF - 0.08 max • **Solder Heat Resistance:** The capacitor shall withstand dipping into solder bath for 5 ±1 sec at 260 ±5°C • **Moisture Resistance:** Capacitor shall be tested for 500 hours at +40°C and 90-95% R.H. without load After the test, capacitor shall meet the following limits.

Cap. change	± 10% of the initial measured value.
DC leakage	≤ current initial specified value.
tan δ	≤ initial specified value.

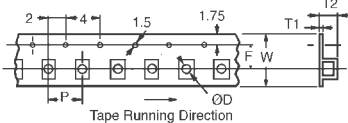
- **Endurance:** After 2000 hours application of DC rated working voltage at +85°C, or derated voltage at +125°C, the capacitor shall meet the following limits.

Cap. change	± 10% of the initial measured value.
DC leakage	≤ 125% of the current initial specified value.
tan δ	≤ initial specified value.



Dimensions (mm)

	∅A ± 2	∅B Min.	C ± 0.5	D ± 0.8	E ± 0.5	W ± 1.5	t ± 0.5
12mm tape	178	50	13.0	21.0	2.0	14.0	2.0
8mm tape	178	50	13.0	21.0	2.0	10.0	2.0



Dimensions (mm)

Size Code	W ± 0.3	A ± 0.2	B ± 0.2	P ± 0.1	T ₁ ± 0.2	F ± 0.1	T ₂	∅D ± 0.1
Y	8.0	1.9	3.5	4.0	1.9	3.5	0.2	1.1
X	8.0	3.3	3.8	4.0	2.1			
C	12.0	3.7	6.4	8.0	3.0	5.5	0.3	1.6
D	12.0	4.7	7.7	8.0	3.3			

Cap. (μF)	EIA Size	Size Code	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Panasonic Part No.
				10	100	500		Size	Pricing	
3.3	A	Y	PCS1335CT-ND	.43	.38	.30	PCS1335TR-ND	2,000	168.00/M	ECS-TOJY335R
4.7	A	Y	PCS1475CT-ND	.45	.39	.31	PCS1475TR-ND	2,000	175.00/M	ECS-TOJY475R
6.8	A	Y	PCS1685CT-ND	.47	.42	.33	PCS1685TR-ND	2,000	185.00/M	ECS-TOJY685R
10	A	Y	PCS1106CT-ND	.52	.46	.36	PCS1106TR-ND	2,000	204.00/M	ECS-TOJY106R
15	B	X	PCS1156CT-ND	.61	.53	.42	PCS1156TR-ND	2,000	239.00/M	ECS-TOJX156R
15	A	Y	P11303CT-ND	.54	.47	.37	P11303TR-ND	2,000	211.00/M	ECS-TOJY156R
22	A	Y	P11304CT-ND	.85	.75	.59	P11304TR-ND	2,000	335.00/M	ECS-TOJY226R
22	B	X	PCS1226CT-ND	.63	.55	.43	PCS1226TR-ND	2,000	245.00/M	ECS-TOJX226R
33	C	C	PCS1336CT-ND	1.17	1.02	.81	PCS1336TR-ND	750	366.75	ECS-TOJX336R
47	B	X	P11305CT-ND	.80	.70	.56	P11305TR-ND	2,000	316.00/M	ECS-TOJX476R
47	D	D	PCS1476CT-ND	1.41	1.24	.98	PCS1476TR-ND	750	443.25	ECS-TOJY476R
68	C	C	P11306CT-ND	1.17	1.02	.81	P11306TR-ND	750	366.75	ECS-TOJX686R
68	D	D	PCS1686CT-ND	1.56	1.37	1.08	PCS1686TR-ND	750	489.75	ECS-TOJY686R
100	D	D	P11307CT-ND	1.65	1.44	1.14	P11307TR-ND	750	517.50	ECS-TOJY107R
200	D	D	P11308CT-ND	2.26	1.97	1.56	P11308TR-ND	750	709.50	ECS-TOJY227R
2.2	A	Y	PCS2225CT-ND	.43	.38	.30	PCS2225TR-ND	2,000	168.00/M	ECS-T1AY225R
3.3	A	Y	PCS2335CT-ND	.44	.38	.30	PCS2335TR-ND	2,000	172.00/M	ECS-T1AY335R
4.7	A	Y	PCS2475CT-ND	.48	.42	.33	PCS2475TR-ND	2,000	189.00/M	ECS-T1AY475R
10	A	Y	P11309CT-ND	.55	.48	.38	P11309TR-ND	2,000	215.00/M	ECS-T1AY106R
10	B	X	PCS2106CT-ND	.61	.53	.42	PCS2106TR-ND	2,000	239.00/M	ECS-T1AX106R
15	B	X	PCS2156CT-ND	.63	.55	.43	PCS2156TR-ND	2,000	245.00/M	ECS-T1AX156R
22	B	X	P11310CT-ND	.71	.62	.49	P11310TR-ND	2,000	280.00/M	ECS-T1AX226R
22	C	C	PCS2226CT-ND	1.14	.99	.78	PCS2226TR-ND	750	356.25	ECS-T1AC226R
33	B	X	P11311CT-ND	.81	.71	.56	P11311TR-ND	2,000	319.00/M	ECS-T1AX336R
33	D	D	PCS2336CT-ND	1.41	1.24	.98	PCS2336TR-ND	750	443.25	ECS-T1AD336R
47	C	C	P11312CT-ND	1.23	1.08	.85	P11312TR-ND	750	386.25	ECS-T1AC476R
47	D	D	PCS2476CT-ND	1.53	1.34	1.06	PCS2476TR-ND	750	480.75	ECS-T1AD476R
100	D	D	P11313CT-ND	1.71	1.50	1.18	P11313TR-ND	750	537.75	ECS-T1AD107R
150	D	D	P11314CT-ND	2.14	1.87	1.48	P11314TR-ND	750	673.50	ECS-T1AD157R
0.68	A	Y	PCS3684CT-ND	.43	.38	.30	PCS3684TR-ND	2,000	168.00/M	ECS-T1CY684R
1.0	A	Y	PCS3105CT-ND	.43	.38	.30	PCS3105TR-ND	2,000	168.00/M	ECS-T1CY105R
1.5	A	Y	PCS3155CT-ND	.43	.38	.30	PCS3155TR-ND	2,000	168.00/M	ECS-T1CY155R
2.2	A	Y	PCS3225CT-ND	.44	.38	.30	PCS3225TR-ND	2,000	172.00/M	ECS-T1CY225R
3.3	A	Y	PCS3335CT-ND	.48	.42	.33	PCS3335TR-ND	2,000	189.00/M	ECS-T1CY335R
4.7	A	Y	PCS3475CT-ND	.52	.46	.36	PCS3475TR-ND	2,000	204.00/M	ECS-T1CY475R
6.8	A	Y	P11315CT-ND	.57	.50	.39	P11315TR-ND	2,000	223.00/M	ECS-T1CY685R
6.8	B	X	PCS3685CT-ND	.66	.58	.46	PCS3685TR-ND	2,000	259.00/M	ECS-T1CX685R
10	B	X	PCS3106CT-ND	.63	.55	.43	PCS3106TR-ND	2,000	245.00/M	ECS-T1CX106R
15	B	X	P11316CT-ND	.71	.62	.49	P11316TR-ND	2,000	280.00/M	ECS-T1CX156R
15	C	C	PCS3156CT-ND	1.14	.99	.78	PCS3156TR-ND	750	356.25	ECS-T1CC156R
22	C	C	P11317CT-ND	1.23	1.08	.85	P11317TR-ND	750	386.25	ECS-T1CC226R
22	D	D	PCS3226CT-ND	1.41	1.24	.98	PCS3226TR-ND	750	443.25	ECS-T1CD226R
33	C	C	P11318CT-ND	1.23	1.08	.85	P11318TR-ND	750	386.25	ECS-T1CC336R
33	D	D	PCS3336CT-ND	1.53	1.34	1.06	PCS3336TR-ND	750	480.75	ECS-T1CD336R
47	D	D	P11319CT-ND	1.65	1.44	1.14	P11319TR-ND	750	517.50	ECS-T1CD476R
68	D	D	P11320CT-ND	1.71	1.50	1.18	P11320TR-ND	750	537.75	ECS-T1CD686R
0.68	A	Y	PCS4684CT-ND	.43	.38	.30	PCS4684TR-ND	2,000	168.00/M	ECS-T1DY684R
1.5	A	Y	PCS4155CT-ND	.44	.38	.30	PCS4155TR-ND	2,000	172.00/M	ECS-T1DY155R
2.2	B	X	PCS4225CT-ND	.62	.54	.43	PCS4225TR-ND	2,000	244.00/M	ECS-T1DX225R
3.3	A	Y	P11321CT-ND	.52	.46	.36	P11321TR-ND	2,000	204.00/M	ECS-T1DY335R
3.3	B	X	PCS4335CT-ND	.59	.51	.41	PCS4335TR-ND	2,000	230.00/M	ECS-T1DX335R
4.7	A	Y	P11322CT-ND	.57	.50	.39	P11322TR-ND	2,000	223.00/M	ECS-T1DY475R
4.7	B	X	PCS4475CT-ND	.61	.53	.42	PCS4475TR-ND	2,000	239.00/M	ECS-T1DX475R
6.8	B	X	P11323CT-ND	.63	.55	.43	P11323TR-ND	2,000	245.00/M	ECS-T1DX685R
6.8	C	C	PCS4685CT-ND	1.06	.92	.73	PCS4685TR-ND	750	331.50	ECS-T1DC685R
10	B	X	P11324CT-ND	.71	.62	.49	P11324TR-ND	2,000	280.00/M	ECS-T1DX106R
10	C	C	PCS4106CT-ND	1.14	.99	.78	PCS4106TR-ND	750	356.25	ECS-T1DC106R
15	C	C	P11325CT-ND	1.23	1.08	.85	P11325TR-ND	750	386.25	ECS-T1DC156R
15	D	D	PCS4156CT-ND	1.41	1.24	.98	PCS4156TR-ND	750	443.25	ECS-T1DD156R
22	C	C	P11326CT-ND	1.54	1.34	1.06	P11326TR-ND	750	482.25	ECS-T1DC226R
22	D	D	PCS4226CT-ND	1.52	1.33	1.05	PCS4226TR-ND	750	476.25	ECS-T1DD226R
33	D	D	P11327CT-ND	1.65	1.44	1.14	P11327TR-ND	750	517.50	ECS-T1DD336R
0.47	A	Y	PCS5474CT-ND	.44	.38	.30	PCS5474TR-ND	2,000	172.00/M	ECS-T1EY474R
1.0	A	Y	PCS5105CT-ND	.44	.38	.30	PCS5105TR-ND	2,000	172.00/M	ECS-T1EY105R
1.5	A	Y	P11328CT-ND	.48	.42	.33	P11328TR-ND	2,000	189.00/M	ECS-T1EY155R
1.5	B	X	PCS5155CT-ND	.59	.51	.41	PCS5155TR-ND	2,000	230.00/M	ECS-T1EX155R
2.2	A	Y	P11329CT-ND	.57	.50	.39	P11329TR-ND	2,000	223.00/M	ECS-T1EY225R
2.2	B	X	PCS5225CT-ND	.61	.53	.42	PCS5225TR-ND	2,000	239.00/M	ECS-T1EX225R
3.3	B	X	PCS5335CT-ND	.61	.53	.42	PCS5335TR-ND	2,000	239.00/M	ECS-T1EX335R
4.7	B	X	P11330CT-ND	.62	.54	.43	P11330TR-ND	2,000	242.00/M	ECS-T1EX475R
4.7	C	C	PCS5475CT-ND	1.07	.94	.74	PCS5475TR-ND	750	336.75	ECS-T1EC475R
6.8	C	C	PCS5685CT-ND	1.17	1.02	.81	PCS5685TR-ND	750	366.75	ECS-T1EC685R
10	C	C	P11331CT-ND	1.19	1.04	.82	P11331TR-ND	750	373.50	ECS-T1EX106R
10	D	D	PCS5106CT-ND	1.41	1.23	.97	PCS5106TR-ND	750	441.00	ECS-T1ED106R
15	D	D	PCS5156CT-ND	1.58	1.38	1.09	PCS5156TR-ND	750	495.75	ECS-T1ED156R
22	D	D	PCS5226CT-ND	1.62	1.41	1.12	PCS5226TR-ND	750	507.75	ECS-T1ED226R
.1	A	Y	PCS6104CT-ND	.45	.39	.31	PCS6104TR-ND	2,000	175.00/M	ECS-T1VY104R
.15	A	Y	PCS6154CT-ND	.45	.39	.31	PCS6154TR-ND	2,000	175.00/M	ECS-T1VY154R
.22	A	Y	PCS6224CT-ND	.43	.38	.30	PCS6224TR-ND	2,000	168.00/M	ECS-T1VY224R
.33	A	Y	PCS6334CT-ND	.43	.38	.30	PCS6334TR-ND	2,000	168.00/M	ECS-T1VY334R
.47	A	Y	PCS6474CT-ND	.43	.38	.30	PCS6474TR-ND	2,000	168.00/M	ECS-T1VY474R
.68	A	Y	PCS6684CT-ND	.44	.38	.30	PCS6684TR-ND	2,000	172.00/M	ECS-T1VY684R
1.0	A	Y	P11332CT-ND	.48	.42	.33	P11332TR-ND	2,000	189.00/M	ECS-T1VY105R
1.0	B	X	PCS6105CT-ND	.59	.51	.41	PCS6105TR-ND	2,000	230.00/M	ECS-T1VX105R
1.5	B	X	PCS6155CT-ND	.61	.53	.42	PCS6155TR-ND	2,000	239.00/M	ECS-T1VX155R
2.2	B	X	PCS6225CT-ND	.61	.53	.42	PCS6225TR-ND	2,000	239.00/M	ECS-T1VX225R
3.3	B	X	P11333CT-ND	.62	.54	.43	P11333TR-ND	2,000	242.00/M	ECS-T1VX335R
3.3	C	C	PCS6335CT-ND	1.07	.94	.74	PCS6335TR-ND	2,000	336.75	ECS-T1VC335R
4.7	C	C	PCS6475CT-ND	1.16	1.02	.80	PCS6475TR-ND	750	364.50	ECS-T1VC475R
6.8	C	C	P11334CT-ND	1.19	1.04	.82	P11334TR-ND	750	373.50	ECS-T1VC685R
6.8	D	D	PCS6685CT-ND	1.41	1.23	.97	PCS6685TR-ND	750	441.00	ECS-T1VD685R