

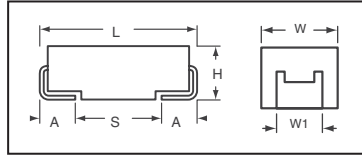
TCJ Series Conductive Polymer Tantalum Capacitors



The TCJ Series of tantalum capacitors with a conductive polymer electrode offers lower ESR, safer non-ignition failure mode and better capacitance retention compared to the conventional MnO2 electrode capacitors.

The TCJ series is suitable for power management systems with operating temperatures up to 125°C and is also ready for lead free-assembly systems up to 3x reflow with 260°C peak temperature.

- Temperature Range: -55°C - 125°C
- Capacitance Tolerance: ±20%



Case Size	EIA Code	Dimensions - mm					
		L	W	H	W1	A	S (Min.)
A	3216-18	3.20	1.60	1.60	1.20	0.80	1.80
B	3528-21	3.50	2.80	1.90	2.20	0.80	1.40
C	6032-28	6.00	3.20	2.60	2.20	1.30	2.90
G	3216-15	3.20	1.60	1.50	1.20	0.80	1.10
H	3528-12	3.50	2.80	1.50	2.20	0.80	1.40
R	2012-12	2.05	1.30	1.20	1.0	0.50	0.85
T	3528-12	3.50	2.80	1.20	2.20	0.80	1.40
W	6032-15	6.00	3.20	1.50	2.20	1.30	2.90

Rated Voltage (V)	Capacitance (µF)	Case Size	DF % Maximum	DCL (µA) Maximum	ESR Maximum (mΩ) @100kHz	RMS Current (mA) 25°C @100kHz	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		AVX Part No.
								1	10	100		Qty.	Pricing	
2.5	68	A	6	17.0	250	548	478-3460-1-ND	2.05	1.78	1.56	478-3460-2-ND	2,000	302.36/M	TCJA686M002R0250
	100	A	6	25.0	200	612	478-3452-1-ND	2.05	1.78	1.56	478-3452-2-ND	2,000	302.36/M	TCJA107M002R0200
	100	B	6	25.0	70	1,102	478-3462-1-ND	2.05	1.78	1.56	478-3462-2-ND	2,000	302.36/M	TCJB107M002R0070
	150	B	6	37.5	70	1,102	478-3464-1-ND	2.05	1.78	1.56	478-3464-2-ND	2,000	351.10/M	TCJB157M002R0070
4	33	A	6	13.2	300	500	478-3455-1-ND	2.05	1.78	1.56	478-3455-2-ND	2,000	302.36/M	TCJA336M004R0300
	47	A	6	18.8	200	612	478-3457-1-ND	2.05	1.78	1.56	478-3457-2-ND	2,000	308.96/M	TCJA476M004R0200
	47	T	8	18.8	80	1,000	478-3479-1-ND	2.13	1.85	1.62	478-3479-2-ND	2,500	379.18/M	TCJT476M004R0080
	68	A	6	27.2	250	548	478-3461-1-ND	2.05	1.78	1.56	478-3461-2-ND	2,000	302.36/M	TCJA686M004R0250
	68	B	6	27.2	70	1,102	478-3137-1-ND†	.91	.80	.70	478-3137-2-ND	2,000	308.96/M	TCJB686M004R0070
	68	T	8	27.2	80	1,000	478-3480-1-ND	2.13	1.85	1.62	478-3480-2-ND	2,500	379.18/M	TCJT686M004R0080
	100	A	6	40.0	200	612	478-3453-1-ND	2.05	1.78	1.56	478-3453-2-ND	2,000	308.96/M	TCJA107M004R0200
	100	B	8	40.0	70	1,102	478-3129-1-ND†	.91	.80	.70	478-3129-2-ND	2,000	308.96/M	TCJB107M004R0070
	100	G	10	40.0	300	483	478-5657-1-ND	2.46	2.15	1.88	478-5657-2-ND	2,500	836.84/M	TCJG107M004R0300
	150	B	6	60.0	70	1,102	478-3465-1-ND	2.05	1.78	1.56	478-3465-2-ND	2,000	358.53/M	TCJB157M004R0070
	220	B	10	88.0	70	1,102	478-5638-1-ND	2.56	2.23	1.95	478-5638-2-ND	2,000	870.71/M	TCJB227M004R0070
	220	B	10	88.0	45	1,374	478-6134-1-ND	2.40	2.09	1.83	478-6134-2-ND	2,000	814.54/M	TCJB227M004R0045
6.3	10	A	6	6.0	300	500	478-3134-1-ND†	.78	.68	.59	478-3134-2-ND	2,000	262.70/M	TCJA106M006R0300
	10	R	6	6.0	500	332	478-3471-1-ND	2.48	2.16	1.89	478-3471-2-ND	2,500	409.75/M	TCJR106M006R0500
	22	A	6	13.2	300	500	478-4710-1-ND	.81	.71	.62	478-4710-2-ND	2,000	274.27/M	TCJA226M006R0300
	22	T	6	13.2	150	730	478-3475-1-ND	2.13	1.85	1.62	478-3475-2-ND	2,500	379.18/M	TCJT226M006R0150
	33	A	6	19.8	200	612	478-3456-1-ND	2.05	1.78	1.56	478-3456-2-ND	2,000	308.96/M	TCJA336M006R0200
	33	B	6	19.8	70	1,102	478-4712-1-ND	.95	.83	.73	478-4712-2-ND	2,000	323.01/M	TCJB336M006R0070
	33	B	8	19.8	200	652	478-3467-1-ND	2.05	1.78	1.56	478-3467-2-ND	2,000	302.36/M	TCJB336M006R0200
	33	T	8	19.8	150	730	478-3477-1-ND	2.13	1.85	1.62	478-3477-2-ND	2,500	379.18/M	TCJT336M006R0150
	47	A	6	28.2	200	612	478-3458-1-ND	2.05	1.78	1.56	478-3458-2-ND	2,000	308.96/M	TCJA476M006R0200
	47	B	6	28.2	70	1,102	478-3139-1-ND†	.91	.80	.70	478-3139-2-ND	2,000	308.96/M	TCJB476M006R0070
	47	T	8	28.2	80	1,000	478-3133-1-ND†	1.09	.95	.83	478-3133-2-ND	2,500	369.27/M	TCJT476M006R0080
	68	B	8	40.8	55	1,102	478-4714-1-ND	1.36	1.19	1.04	478-4714-2-ND	2,000	463.44/M	TCJB686M006R0055
	68	B	8	40.8	70	1,102	478-3131-1-ND†	.91	.80	.70	478-3131-2-ND	2,000	308.96/M	TCJB686M006R0070
	68	C	6	40.8	100	1,049	478-3470-1-ND	2.27	1.98	1.73	478-3470-2-ND	500	214.37	TCJC686M006R0100
	68	W	8	40.8	70	1,134	478-5693-1-ND	2.64	2.30	2.01	478-5693-2-ND	1,000	962.41	TCJW686M006R0070
	100	B	10	60.0	45	1,374	478-4711-1-ND	1.28	1.12	.98	478-4711-2-ND	2,000	435.36/M	TCJB107M006R0045
100	B	10	60.0	70	1,102	478-3130-1-ND†	.91	.80	.70	478-3130-2-ND	2,000	308.96/M	TCJB107M006R0070	
150	B	10	90.0	70	1,102	478-4921-1-ND	2.05	1.78	1.56	478-4921-2-ND	2,000	695.58/M	TCJB157M006R0070	
150	H	6	90.0	200	632	478-4715-1-ND	1.21	1.05	.92	478-4715-2-ND	2,500	409.75/M	TCJH157M006R0200	
150	W	6	90.0	70	1,134	478-3481-1-ND	2.48	2.16	1.89	478-3481-2-ND	1,000	438.66	TCJW157M006R0070	
220	B	10	132.0	200	652	478-5749-1-ND	2.35	2.05	1.79	478-5749-2-ND	2,000	798.84/M	TCJB227M006R0200	
10	4.7	R	6	4.7	500	332	478-3472-1-ND	2.48	2.16	1.89	478-3472-2-ND	2,500	409.75/M	TCJR475M010R0500
	10	A	6	10.0	300	500	478-3127-1-ND†	.78	.68	.60	478-3127-2-ND	2,000	265.18/M	TCJA106M010R0300
	15	A	6	15.0	200	612	478-3454-1-ND	2.05	1.78	1.56	478-3454-2-ND	2,000	302.36/M	TCJA156M010R0200
	22	B	6	22.0	300	532	478-3136-1-ND†	.91	.80	.70	478-3136-2-ND	2,000	308.96/M	TCJB226M010R0300
	22	T	6	22.0	150	730	478-3476-1-ND	2.13	1.85	1.62	478-3476-2-ND	2,500	379.18/M	TCJT226M010R0150
	33	B	6	33.0	70	1,102	478-4713-1-ND	.99	.87	.76	478-4713-2-ND	2,000	337.05/M	TCJB336M010R0070
16	10	B	6	16.0	200	652	478-3138-1-ND†	.91	.80	.70	478-3138-2-ND	2,000	308.96/M	TCJB336M010R0200
	33	C	6	33.0	100	1,049	478-3468-1-ND	2.27	1.98	1.73	478-3468-2-ND	500	214.37	TCJC336M010R0100
	47	B	6	47.0	70	1,102	478-3132-1-ND†	.91	.80	.70	478-3132-2-ND	2,000	308.96/M	TCJB476M010R0070
	10	A	6	16.0	200	612	478-3451-1-ND	2.05	1.78	1.56	478-3451-2-ND	2,000	308.96/M	TCJA106M016R0200
35	10	B	6	16.0	200	652	478-5261-1-ND	2.11	1.84	1.61	478-5261-2-ND	2,000	718.71/M	TCJB106M016R0200
	10	T	6	16.0	150	730	478-3473-1-ND	2.13	1.85	1.62	478-3473-2-ND	2,500	379.18/M	TCJT106M016R0150
	15	B	6	24.0	150	753	478-3463-1-ND	2.05	1.78	1.56	478-3463-2-ND	2,000	308.96/M	TCJB156M016R0150
	22	B	6	35.2	150	753	478-3466-1-ND	2.05	1.78	1.56	478-3466-2-ND	2,000	308.96/M	TCJB226M016R0150
47	C	6	35.0	200	742	478-5983-1-ND	3.51	3.06	2.67	478-5983-2-ND	500	638.99	TCJC476M035R0200	

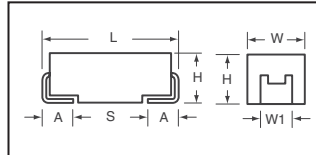
† 478-3447-ND TCJ Series Capacitors Kit 5 each of values denoted. Packaged in convenient mini-style notebook. 38.21

TRJ Series Professional Tantalum Chip Capacitors



The TRJ surface mount series employs established tantalum technology together with new process improvements and advanced manufacturing techniques. This robust series enables extension of the guaranteed 0.5% reliability level to 1000 hours at rated voltage, rated temperature, and 0.1Ω/volt circuit impedance. The moisture penetration barrier, thicker external dielectric layer, and modified manganese process make the capacitor more robust against higher thermo-mechanical stresses during assembly process and also more robust against more severe working conditions in Automotive, Medical, Aerospace, Military, and other applications. Lower ESR options are now available within the professional TRJ while achieving reliability levels twice that of standard tantalum devices. This enables designers of power supplies in long life expectancy applications to use tantalum capacitors with the combined benefits of enhanced reliability and low ESR.

- Voltage Range: 16V - 50V • Temperature Range: -55°C - 125°C



Case Size	EIA Code	Dimensions - mm					
		L	W	H	W1	S (Min.)	A
B	3528-21	3.50	2.80	1.90	2.20	1.40	0.80
C	6032-28	6.00	3.20	2.60	2.20	2.90	1.30
D	7343-31	7.30	4.30	2.90	2.40	4.40	1.30

Rated Voltage (V)	Capacitance (µF)	Case Size	DF % Maximum	DCL (µA) Maximum	ESR Maximum (mΩ) @100kHz	Ripple Current (A) 25°C @100kHz	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		AVX Part No.
								1	10	100		Qty.	Pricing	
16	22	C	6	2.6	700	396	478-4957-1-ND	.99	.87	.76	478-4957-2-ND	500	180.50	TRJC226M016RRJ
	3.3	B	6	0.62	3,740	151	478-4954-1-ND	.72	.63	.55	478-4954-2-ND	2,000	242.88/M	TRJB335M025RRJ
25	47	D	6	8.8	540	527	478-5760-1-ND	3.69	3.22	2.81	478-5760-2-ND	500	672.45	TRJD476K025RRJ
	47	D	6	8.8	250	775	478-5759-1-ND	7.21	6.28	5.48	478-5759-2-ND	500	1311.85	TRJD476K025R0250
35	1.0	B	4	0.3	3,400	158	478-4953-1-ND	.72	.63	.55	478-4953-2-ND	2,000	242.88/M	TRJB105K035RRJ
	10	D	6	2.6	800	433	478-4958-1-ND	1.59	1.39	1.21	478-4958-2-ND</			