

# AVX TCJ Series Conductive Polymer Tantalum Capacitors

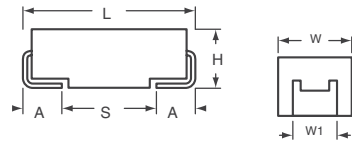


The TCJ Series of tantalum capacitors with a conductive polymer electrode offers lower ESR, safer non-ignition failure mode and better capacitance retention compared to the conventional MnO<sub>2</sub> electrode capacitors.

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	W <sub>1</sub>	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
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



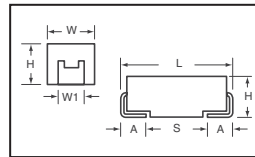
Rated Voltage (V)	Capacitance (µF)	Case Size	DF % Maximum	DCL (µA) Maximum	ESR Maximum (mΩ)@100kHz	RMS Current (mA) @100kHz & 25°C	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		AVX Part No.
								1	10	100		Qty.	Pricing	
2.5	68	A	6	17.0	250	548	478-3460-1-ND	2.48	2.16	1.89	478-3460-2-ND	2,000	366.00/M	TCJA686M002R0250
	100	A	6	25.0	200	612	478-3452-1-ND	2.48	2.16	1.89	478-3452-2-ND	2,000	366.00/M	TCJA107M002R0200
	100	B	6	25.0	70	1102	478-3462-1-ND	2.48	2.16	1.89	478-3462-2-ND	2,000	366.00/M	TCJB107M002R0070
	150	B	6	37.5	70	1102	478-3464-1-ND	2.48	2.16	1.89	478-3464-2-ND	2,000	425.00/M	TCJB157M002R0070
4	22	A	6	8.8	300	500	478-3135-1-ND†	.95	.83	.72	—	—	—	TCJA226M004R0300
	33	A	6	13.2	300	500	478-3455-1-ND	2.48	2.16	1.89	478-3455-2-ND	2,000	366.00/M	TCJA336M004R0300
	47	A	6	18.8	200	612	478-3457-1-ND	2.48	2.16	1.89	478-3457-2-ND	2,000	374.00/M	TCJA476M004R0200
	47	T	8	18.8	80	1000	478-3479-1-ND	2.58	2.24	1.96	478-3479-2-ND	2,500	459.00/M	TCJA476M004R0080
	68	A	6	27.2	250	548	478-3461-1-ND	2.48	2.16	1.89	478-3461-2-ND	2,000	366.00/M	TCJA686M004R0250
	68	B	6	27.2	70	1102	478-3137-1-ND†	1.10	.96	.84	478-3137-2-ND	2,000	374.00/M	TCJB686M004R0070
	100	T	8	27.2	80	1000	478-3480-1-ND	2.58	2.24	1.96	478-3480-2-ND	2,500	459.00/M	TCJT686M004R0080
	100	A	6	40.0	200	612	478-3453-1-ND	2.48	2.16	1.89	478-3453-2-ND	2,000	374.00/M	TCJA107M004R0200
	100	B	8	40.0	70	1102	478-3129-1-ND†	1.10	.96	.84	478-3129-2-ND	2,000	374.00/M	TCJB107M004R0070
	100	T	8	40.0	150	730	478-3474-1-ND	2.58	2.24	1.96	—	—	—	TCJT107M004R0150
	150	B	6	60.0	70	1102	478-3465-1-ND	2.48	2.16	1.89	478-3465-2-ND	2,000	434.00/M	TCJB157M004R0070
	6.3	10	A	6	6.0	300	500	478-3134-1-ND†	.94	.82	.72	—	—	—
10		R	6	6.0	500	332	478-3471-1-ND	3.00	2.61	2.28	478-3471-2-ND	2,500	496.00/M	TCJR106M006R0500
22		A	6	13.2	300	500	478-4710-1-ND	.98	.85	.75	478-4710-2-ND	2,000	332.00/M	TCJA226M006R0300
22		T	6	13.2	150	730	478-3475-1-ND	2.58	2.24	1.96	478-3475-2-ND	2,500	459.00/M	TCJT226M006R0150
33		A	6	19.8	200	612	478-3456-1-ND	2.48	2.16	1.89	478-3456-2-ND	2,000	374.00/M	TCJA336M006R0200
33		B	6	19.8	70	1102	478-3134-1-ND†	1.15	1.01	.88	478-3134-2-ND	2,000	391.00/M	TCJB336M006R0070
33		B	6	19.8	200	652	478-3467-1-ND	2.48	2.16	1.89	478-3467-2-ND	2,000	366.00/M	TCJB336M006R0200
33		T	8	19.8	150	730	478-3477-1-ND	2.58	2.24	1.96	478-3477-2-ND	2,500	459.00/M	TCJT336M006R0150
47		A	6	28.2	200	612	478-3458-1-ND	2.48	2.16	1.89	478-3458-2-ND	2,000	374.00/M	TCJA476M006R0200
47		B	6	28.2	70	1102	478-3139-1-ND†	1.10	.96	.84	478-3139-2-ND	2,000	374.00/M	TCJB476M006R0070
47		T	8	28.2	80	1000	478-3133-1-ND†	1.32	1.15	1.00	478-3133-2-ND	2,500	447.00/M	TCJT476M006R0080
68		B	8	40.8	55	1102	478-4714-1-ND	1.65	1.44	1.26	478-4714-2-ND	2,000	561.00/M	TCJB686M006R0055
68		B	8	40.8	70	1102	478-3131-1-ND†	1.10	.96	.84	478-3131-2-ND	2,000	374.00/M	TCJB686M006R0070
68		C	6	40.8	100	1049	478-3470-1-ND	2.75	2.40	2.09	478-3470-2-ND	500	259.50	TCJC686M006R0100
100		B	10	60.0	45	1374	478-4711-1-ND	1.55	1.35	1.18	478-4711-2-ND	2,000	527.00/M	TCJB107M006R0045
100		B	10	60.0	70	1102	478-3130-1-ND†	1.10	.96	.84	478-3130-2-ND	2,000	374.00/M	TCJB107M006R0070
150		B	10	90.0	70	1102	478-4921-1-ND	2.48	2.16	1.89	478-4921-2-ND	2,000	842.00/M	TCJB157M006R0070
150		H	6	90.0	200	632	478-4715-1-ND	1.46	1.27	1.11	478-4715-2-ND	2,500	496.00/M	TCJA157M006R0200
150		W	6	90.0	70	1134	478-3481-1-ND	3.00	2.61	2.28	478-3481-2-ND	1,000	531.00	TCJW157M006R0070
10		4.7	R	6	4.7	500	332	478-3472-1-ND	3.00	2.61	2.28	478-3472-2-ND	2,500	496.00/M
	10	A	6	10.0	300	500	478-3127-1-ND†	.95	.83	.72	478-3127-2-ND	2,000	321.00/M	TCJA106M010R0300
	15	A	6	15.0	200	612	478-3454-1-ND	2.48	2.16	1.89	478-3454-2-ND	2,000	366.00/M	TCJA156M010R0200
	22	B	6	22.0	300	532	478-3136-1-ND†	1.10	.96	.84	478-3136-2-ND	2,000	374.00/M	TCJB226M010R0300
	22	T	6	22.0	150	730	478-3476-1-ND	2.58	2.24	1.96	478-3476-2-ND	2,500	459.00/M	TCJT226M010R0150
	33	B	6	33.0	70	1102	478-4713-1-ND	1.20	1.05	.92	478-4713-2-ND	2,000	408.00/M	TCJB336M010R0070
	33	B	6	33.0	200	652	478-3138-1-ND†	1.10	.96	.84	478-3138-2-ND	2,000	374.00/M	TCJB336M010R0200
	33	C	6	33.0	100	1049	478-3468-1-ND	2.75	2.40	2.09	478-3468-2-ND	500	259.50	TCJC336M010R0100
	33	T	6	33.0	50	730	478-3478-1-ND	2.58	2.24	1.96	478-3478-2-ND	2,500	459.00/M	TCJT336M010R0150
	47	B	6	47.0	70	1102	478-3132-1-ND†	1.10	.96	.84	478-3132-2-ND	2,000	374.00/M	TCJB476M010R0070
16	6.8	A	6	10.9	200	612	478-3459-1-ND	2.48	2.16	1.89	—	—	—	TCJA685M016R0200
	10	A	6	16.0	200	612	478-3451-1-ND	2.48	2.16	1.89	478-3451-2-ND	2,000	374.00/M	TCJA106M016R0200
	10	T	6	16.0	150	730	478-3473-1-ND	2.58	2.24	1.96	478-3473-2-ND	2,500	459.00/M	TCJT106M016R0150
	15	B	6	24.0	150	753	478-3463-1-ND	2.48	2.16	1.89	478-3463-2-ND	2,000	374.00/M	TCJB156M016R0150
	22	B	6	35.2	150	753	478-3466-1-ND	2.48	2.16	1.89	478-3466-2-ND	2,000	374.00/M	TCJB226M016R0150

† 478-3447-ND TCJ Series Capacitors Kit 5 each of values denoted. Packaged in convenient mini-style notebook. 46.25

# 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 manganising 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 - 35V • Temperature Range: -55°C - 125°C



Case Size	EIA Code	Dimensions - mm					
		L	W	H	W <sub>1</sub>	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	3.20	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) @100kHz & 25°C	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		AVX Part No.
								1	10	100		Qty.	Pricing	
16	6.8	B	6	0.82	2650	179	478-4955-1-ND	.87	.76	.66	478-4955-2-ND	2,000	294.00/M	TRJB685M016RRJ
	22	C	6	2.6	700	396	478-4957-1-ND	1.20	1.05	.92	478-4957-2-ND	500	218.50	TRJC226M016RRJ
20	10	C	6	1.5	800	371	478-4956-1-ND	1.07	.94	.82	478-4956-2-ND	500	194.50	TRJC106M020RRJ
25	3.3	B	6	0.62	3740	151	478-4954-1-ND	.87	.76	.66	478-4954-2-ND	2,000	294.00/M	TRJB335M025RRJ
35	1.0	B	4	0.3	3400	158	478-4953-1-ND	.87	.76	.66	478-4953-2-ND	2,000	294.00/M	TRJB105K035RRJ
	10	D	6	2.6	800	433	478-4958-1-ND	1.93	1.68	1.47	478-4958-2-ND	500	350.50	TRJD106K035RRJ

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