

KEMET Conductive Polymer Chip Capacitors



RoHS Compliant This product is RoHS compliant.

T525 AND T530 SERIES - 125°C LOW ESR, KO-CAP

KEMET has developed a new type of tantalum capacitor that replaces the solid manganese dioxide electrode with a solid conductive polymer. This product is named the KO-CAP for KEMET Organic Capacitor. The advantages of the polymer include very low ESR and elimination of the potentially catastrophic failure mode that may occur with standard tantalum capacitors in a high surge current application.

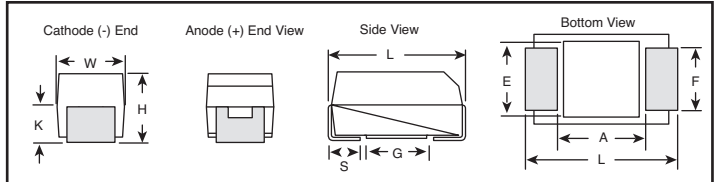


Features for T525:

- Polymer Cathode Technology
- 125°C Maximum temperature capability
- High frequency capacitance retention
- Non-Ignition failure mode
- Halogen free epoxy
- Use up to 90% of rated voltage (10% derating) for part types ≤ 10 volts
- Use up to 80% of rated voltage (20% derating) for part types: 10 volts
- Operating Temperature Range: -55°C to +125°C
- 100% Accelerated steady state aging
- 100% Surge current testing
- Self-healing mechanism
- Volumetrically efficient
- Extremely stable ESR at 125°C
- EIA standard case size
- RoHS Compliant/Leadfree Termination

Features for T530:

- Highest CV in Standard EIA Size
- Extremely low ESR
- 125°C Max, temperature capability
- Polymer Cathode technology
- High frequency capacitance retention
- Non-Ignition failure mode
- Molded case (pick-and-place precision)
- 100% Accelerated steady state aging
- 100% Surge current testing
- Utilizes multiple tantalum anode technology
- Volumetric efficiency
- Use up to 90% of rated voltage (10% Derating)
- Self-healing mechanism



Case Size		Reel Qty.	Dimensions: mm			K ±0.2	F ±0.1	S ±0.3	A (Min)	G (Ref)	E (Ref)
KEMET	EIA		L	W	H						
B	3528-21	2000	3.5	2.8	1.9	0.9	2.2	0.8	1.1	1.8	2.2
D	7343-31	500	7.3	4.3	2.8	1.5	2.4	1.3	3.8	3.5	3.5
X	3528-12	2500	3.5	2.8	1.2	0.3	2.2	0.8	1.1	1.8	2.2
T	7343-43	500	7.3	4.3	4.0	2.3	2.4	1.3	3.8	3.5	3.5
Y	7343-40	500	7.3	4.3	4.0	1.9	2.4	1.3	3.8	3.5	3.5

T525 Series - High Temperature

MOUSER STOCK NO.	KEMET Part Number	Value (µF)	Case Code	ESR mΩ @ 25°C 100 kHz Max	DC Leakage µA @ 25°C Max	Ripple Current (mA rms)	Price Each			7 Inch Reel Qty.	Price Per Piece
							1	10	100		
2.5 Volt Rating @ 105°C (1.7 Volt Rating at 125°C)											
80-T525T107M2R5ATE80	T525T107M2R5ATE080	100	T	80	25	0.9	1.32	1.16	.99	2500	.66
80-T525D337M2R5ATE25	T525D337M2R5ATE025	330	D	25	83	2.4	3.98	3.48	2.99	500	2.49
80-T525D477M2R5ATE25	T525D477M2R5ATE025	470	D	25	118	2.4	3.98	3.48	2.99	500	2.49
80-T525D687M2R5	T525D687M2R5ATE025	680	D	25	170	2.4	3.98	3.48	2.99	500	2.49
3 Volt Rating @ 105°C (2 Volt Rating at 125°C)											
80-T525B107M3ATE80	T525B107M003ATE080	100	B	80	30	1.0	1.04	.91	.78	2000	.52
80-T525B157M003	T525B157M003ATE080	150	B	80	45	1.0	1.04	.91	.78	2000	.52
80-T525D337M3ATE25	T525D337M003ATE025	330	D	25	99	2.4	3.98	3.48	2.99	500	2.49
80-T525D477M3ATE25	T525D477M003ATE025	470	D	25	141	2.4	3.98	3.48	2.99	500	2.49
80-T525D687M003	T525D687M003ATE025	680	D	25	204	2.4	3.98	3.48	2.99	500	2.49
4 Volt Rating @ 105°C (2.7 Volt Rating at 125°C)											
80-T525T686M4ATE80	T525T686M004ATE080	68	T	80	27	0.9	1.32	1.16	.99	2500	.66
80-T525B686M4ATE80	T525B686M004ATE080	68	B	80	28	1.0	1.04	.91	.78	2000	.52
80-T525B107M004	T525B107M004ATE080	100	B	80	40	1.0	1.04	.91	.78	500	.65
80-T525D227M4ATE25	T525D227M004ATE025	220	D	25	88	2.4	3.98	3.48	2.99	500	2.49
80-T525D337M4ATE25	T525D337M004ATE025	330	D	25	132	2.4	3.98	3.48	2.99	500	2.49
80-T525D477M4ATE25	T525D477M004ATE025	470	D	25	188	2.4	4.18	3.66	3.14	500	2.61
80-T525D477M004	T525D477M004ATE040	470	D	40	188	1.9	3.98	3.48	2.99	500	2.49
6.3 Volt Rating @ 105°C (4.2 Volt Rating at 125°C)											
80-T525B336M6ATE80	T525B336M006ATE080	33	B	80	21	1.0	1.04	.91	.78	2000	.52
80-T525T476M6ATE80	T525T476M006ATE080	47	T	80	30	0.9	1.24	1.09	.93	2500	.62
80-T525B476M6ATE80	T525B476M006ATE080	47	B	80	30	1.0	1.04	.91	.78	2000	.52
80-T525B686M006	T525B686M006ATE080	68	B	80	43	1.0	1.04	.91	.78	2000	.52
80-T525D157M6ATE25	T525D157M006ATE025	150	D	25	95	2.4	4.18	3.66	3.14	500	2.61
80-T525D227M6ATE25	T525D227M006ATE025	220	D	25	139	2.4	4.18	3.66	3.14	500	2.61
80-T525D337M6ATE25	T525D337M006ATE025	330	D	25	208	2.4	4.18	3.66	3.14	500	2.61
10 Volt Rating @ 105°C (6.6 Volt Rating at 125°C)											
80-T525B226M10ATE80	T525B226M010ATE080	22	B	80	22	1.0	1.04	.91	.78	2000	.52
80-T525D107M10ATE25	T525D107M010ATE025	100	D	25	100	2.4	4.18	3.66	3.14	500	2.61
80-T525D107M010	T525D107M010ATE055	100	D	55	100	1.7	3.98	3.48	2.99	500	2.49
80-T525D157M10ATE25	T525D157M010ATE025	150	D	25	150	2.4	4.18	3.66	3.14	500	2.61
80-T525D157M010	T525D157M010ATE055	150	D	55	150	1.7	3.98	3.48	2.99	500	2.49
80-T525D227M10ATE25	T525D227M010ATE025	220	D	25	220	2.4	4.18	3.66	3.14	500	2.61
16 Volt Rating @ 105°C (10.6 Volt Rating at 125°C)											
80-T525D476M16ATE35	T525D476M016ATE035	47	D	35	76	2.1	4.18	3.66	3.14	500	2.61
80-T525D476M016	T525D476M016ATE065	47	D	65	76	1.5	3.98	3.48	2.99	500	2.49

T530 Series High Capacitance - Low ESR

MOUSER STOCK NO.	KEMET Part Number	Value (µF)	Case Code	ESR mΩ @ 25°C 100 kHz Max	DC Leakage µA @ 25°C Max	Ripple Current (mA rms)	Price Each			7 Inch Reel Qty.	Price Per Piece
							1	10	100		
2.5 Volt Rating @ 105°C (1.7 Volt Rating at 125°C)											
80-T530D477M2R5E6	T530D477M2R5ATE006	470	D	6	118	6.5	8.40	7.35	4.20	500	3.78
80-T530D567M2R5E5	T530D567M2R5ATE005	560	D	5	140	7.1	8.80	7.70	4.40	500	3.96
80-T530D687M2R5E10	T530D687M2R5ATE010	680	D	10	170	5.0	8.20	7.18	6.15	500	3.59
80-T530X108M2R5ATE6	T530X108M2R5ATE006	1000	X	6	250	6.7	9.80	8.58	7.35	500	4.29
80-T530X158M2R5ATE5	T530X158M2R5ATE005	1500	X	5	375	7.3	10.40	9.10	7.80	500	4.55
3 Volt Rating @ 105°C (2 Volt Rating at 125°C)											
80-T530D687M3ATE10	T530D687M003ATE010	680	D	10	204	5.0	8.20	7.18	6.15	500	3.59
80-T530X108M003	T530X108M003ATE010	1000	X	10	300	5.2	11.75	8.81	7.05	500	6.25
80-T530X158M003	T530X158M003ATE008	1500	X	8	450	5.8	13.00	9.75	7.80	500	6.50
4 Volt Rating @ 105°C (2.7 Volt Rating at 125°C)											
80-T530D337M4ATE6	T530D337M004ATE006	330	D	6	132	6.5	8.40	7.35	4.20	500	3.78
80-T530D477M004	T530D477M004ATE010	470	D	10	188	5.0	10.25	7.69	6.15	500	5.13
80-T530X687M4ATE6	T530X687M004ATE006	680	X	6	272	6.7	9.80	8.58	7.35	500	4.29
80-T530X687M004	T530X687M004ATE010	680	X	10	272	5.2	11.75	8.81	7.05	500	6.25
80-T530X108M4ATE6	T530X108M004ATE006	1000	X	6	400	6.7	9.80	8.58	7.35	500	4.29
6.3 Volt Rating @ 105°C (4.2 Volt Rating at 125°C)											
80-T530D227M6E6	T530D227M006ATE006	220	D	6	139	6.5	8.40	7.35	4.20	500	3.78
80-T530Y337M6ATE6	T530Y337M006ATE006	330	Y	6	208	6.6	8.80	7.70	4.40	500	3.96
80-T530D337M6ATE10	T530D337M006ATE010	330	D	10	208	5.1	8.00	7.00	6.00	500	3.50
80-T530X477M6ATE6	T530X477M006ATE006	470	X	6	296	6.7	9.80	8.58	7.35	500	4.29
80-T530X477M006	T530X477M006ATE010	470	X	10	296	5.2	11.75	8.81	7.05	500	6.25
10 Volt Rating @ 105°C (5.3 Volt Rating at 125°C)											
80-T530D157M10E06	T530D157M010ATE006	150	D	6	150	6.5	10.50	7.88	6.30	500	5.25
80-T530D227M10ATE10	T530D227M010ATE010	220	D	10	220	5.0	8.00	7.00	6.00	500	3.50
80-T530X337M10E06	T530X337M010ATE006	330	X	6	330	6.7	9.80	8.58	7.35	500	4.29
80-T530X337M010	T530X337M010ATE010	330	X	10	330	5.2	11.75	8.81	7.05	500	6.25



Tantalum Caps, SMD

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