PRODUCTS

KEMET Organic Capacitor
T540/T541 Polymer Commercial Off-the-Shelf (COTS) Series

The Capacitance Company
KEMET CHARGED.

Why Choose KEMET

KEMET applies world-class service and quality to deliver industry-leading, high performance capacitance solutions worldwide. With 95% of possible dielectric solutions, KEMET offers the world's most complete line of surface mount and through-hole capacitor technologies across tantalum, ceramic, film, aluminum and paper dielectrics. One world. One KEMET.

Features & Benefits

- First-to-market polymer cathode technology (COTS) capacitors for military and aerospace applications
- High frequency capacitance retention
- Benign failure mode
- Volumetrically efficient
- Use at up to 90% of rated voltage (10% derating) for part types ≤10V
- Use at up to 80% of rated voltage (20% derating) for part types >10V
- Standard and low ESR levels
- Sn/Pb terminations available
- Surge current testing options
- Single anode (T540) and multiple anode (T541) design
- T541 Series multiple anode design delivers the lowest ESR values in the industry

Product Checklist

- What is the circuit switching frequency?
- What is the circuit operating voltage?
- Are there any voltage spikes expected?
- Are there any environmental concerns?
- What are the physical space restrictions?
- What is the expected annual volume?

For more information, samples and engineering kits, please visit us at www.kemet.com or call 1.877.myKEMET.

Programs Supported

Decoupling and filtering in defense and aerospace applications that require very low ESR:

- Radar
- Sonar
- Power supplies
- Guidance systems

Electrical/Physical Characteristics

Case Sizes	Dielectric	Operating Temperature Range	Rated Capacitance Range	Capacitance Tolerance	Rated Voltage Range	DF (120Hz)	ESR (100kHz)	Leakage Current
T540								
B/3528-21 D/7343-31 C/6032-28	Tantalum Organic Polymer	-55°C to +125°C	4.7 – 680 µF	M Tolerance (20%)	2.5V to 63V	≥10%	25mΩ – 150mΩ	≤ 0.1CV (µA) at rated voltage after 5 minutes
T541								
D/7343-31 X/7343-43 Y/7343-40	Tantalum Organic Polymer	-55°C to +125°C	10 – 1500 µF	M Tolerance (20%)	2.5V to 63V	8%	5mΩ – 150mΩ	≤ 0.1CV (µA) at rated voltage after 5 minutes

T540

T541

Ordering Information

Capacitor Class	Series	Case Sizes	Capacitance Code (pF)	Capacitance Tolerance	Voltage	Failure Rate/ Design	Lead Material	Surge	ESR
T	**540**	**D**	**107**	**M**	**10**	**A**	**H**	**65**	**10**
T= Tantalum	540 = Polymer COTS	B=3528-21 D=7343-31	First two digits represent significant figures. Third digit specifies number of zeros.	M = ±20%	2R5 = 2.5V 003 = 3V 004 = 4V 006 = 6.3V 010 = 10V 016 = 16V 020= 20V 025 = 25V 035 = 35V 050 = 50V 063 = 63V	A = N/A	H = Standard Solder Coated (SnPb 5% Pb minimum)	65=No Surge 66=10 cycles @ 25 °C 67=10 cycles -55 and 85 °C	10 = ESR - Standard 20 = ESR-Low 30 = ESR-Ultra Low
T	**541**	**D**	**157**	**M**	**10**	**A**	**H**	**65**	**10**
T= Tantalum	541 = Polymer COTS Multiple Anode	D=7343-31 X=7343-43 Y=7343-40	First two digits represent significant figures. Third digit specifies number of zeros.	M = ±20%	2R5 = 2.5V 003 = 3V 004 = 4V 006 = 6.3V 010 = 10V 016 = 16V 020= 20V 025 = 25V 035 = 35V 050 = 50V 063 = 63V	A = N/A	H = Standard Solder Coated (SnPb 5% Pb minimum)	65=No Surge 66=10 cycles @ 25 °C 67=10 cycles -55 and 85 °C	10 = ESR - Standard 20 = ESR-Low 30 = ESR-Ultra Low