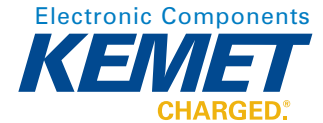




KEMET Organic Capacitor (KO-CAP®)

T540/ T541 High Reliability Commercial-Off-the-Shelf (COTS) Polymer Electrolytic



Why Choose KEMET

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery and service.

Features & Benefits

- KO-CAP® Reliability Assessment method
 - Failure rates available:
 - B = 0.1%/1,000 hours
 - C = 0.01%/1,000 hours
 - D = 0.001%/1,000 hours
- High frequency capacitance retention
- Benign failure mode
- Volumetrically efficient
- High ripple current capability
- Use at up to 90% of rated voltage (10% derating) for part types ≤ 10 V
- Use at up to 80% of rated voltage (20% derating) for part types > 10 V
- Very low ESR down to 5 mΩ
- Sn/Pb standard terminations
- Surge current testing options per MIL-PRF-55365
- 100% steady state aging
- Approved for DLA Drawings 04051 & 04052
- Polymer cathode technology
- Operating temperature up to +125°C
- EIA standard case sizes

Product Checklist

- Does your program require established reliability products?
- 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?

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 & Competition

Case Sizes	Dielectric	Operating Temperature Range (°C)	Capacitance Range	Capacitance Tolerance	Voltage Range (VDC)	DF (120 Hz)	ESR (mΩ) at (100 kHz)	Leakage Current (μA)
T540								
B/3528-21 C/6032-28 D/7343-31	Polymer Electrolytic	-55 to +125	4.7 – 680 μF	M Tolerance (20%)	2.5 to 63	≥10%	25 – 150	≤ 0.1 CV at rated voltage after 5 minutes
T541								
D/7343-31 X/7343-43 Y/7343-40	Polymer Electrolytic	-55 to +125	10 – 1,500 μF	M Tolerance (20%)	2.5 to 63	8%	5 – 150	≤ 0.1 CV at rated voltage after 5 minutes



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Ordering Information

T540										
T	540	D	107	M	10	A	H	65	10	
Capacitor Class	Series	Case Size	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Failure Rate/ Design	Termination Finish	Surge Option	ESR	Packaging (C-Spec)
T = Tantalum	540 = Polymer COTS	B, C, D,	First two digits represent significant figures. Third digit specifies number of zeros.	M = ±20%	2R5 = 2.5 003 = 3 004 = 4 006 = 6.3 010 = 10 016 = 16 020 = 20 025 = 25 035 = 35 050 = 50 063 = 63	A = N/A B = 0.1%/1,000 hours C = 0.01%/1,000 hours D = 0.001%/1,000 hours	H = Standard solder coated (SnPb 5% Pb minimum)	65 = 4 cycles at 25°C ±5°C 66 = 10 cycles at 25°C ±5°C 67 = 10 cycles at -55°C +0°C/-5°C and +85°C ±5°C	10 = ESR - Standard 20 = ESR - Low	Blank = 7" Reel 7280 = 13" Reel

DLA Drawing 04051		
04051-	001	A
Drawing Number	Dash Number	Surge Current Option
04051	See Part Number List	Blank = 4 cycles +25°C ±5°C before voltage aging A = 10 cycles +25°C ±5°C after voltage aging B = 10 cycles -55°C +0°C/-5°C and +85°C ±5°C after voltage aging

T541										
T	541	D	157	M	10	A	H	65	10	
Capacitor Class	Series	Case Size	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Failure Rate/ Design	Termination Finish	Surge Option	ESR	Packaging (C-Spec)
T = Tantalum	541 = Polymer COTS Multiple Anode	D, X, Y	First two digits represent significant figures. Third digit specifies number of zeros.	M = ±20%	2R5 = 2.5 003 = 3 004 = 4 006 = 6.3 010 = 10 016 = 16 020 = 20 025 = 25 035 = 35 050 = 50 063 = 63	A = N/A B = 0.1%/1,000 hours C = 0.01%/1,000 hours D = 0.001%/1,000 hours	H = Standard solder coated (SnPb 5% Pb minimum)	65 = 4 cycles at 25°C ±5°C 66 = 10 cycles at 25°C ±5°C 67 = 10 cycles at -55°C +0°C/-5°C and +85°C ±5°C	10 = ESR - Standard 20 = ESR - Low 30 = ESR - Ultra Low ESR	Blank = 7" Reel 7280 = 13" Reel

DLA Drawing 04052		
04052-	001	A
Drawing Number	Dash Number	Surge Current Option
04052	See Part Number List	Blank = 4 cycles +25°C ±5°C before voltage aging A = 10 cycles +25°C ±5°C after voltage aging B = 10 cycles -55°C +0°C/-5°C and +85°C ±5°C after voltage aging