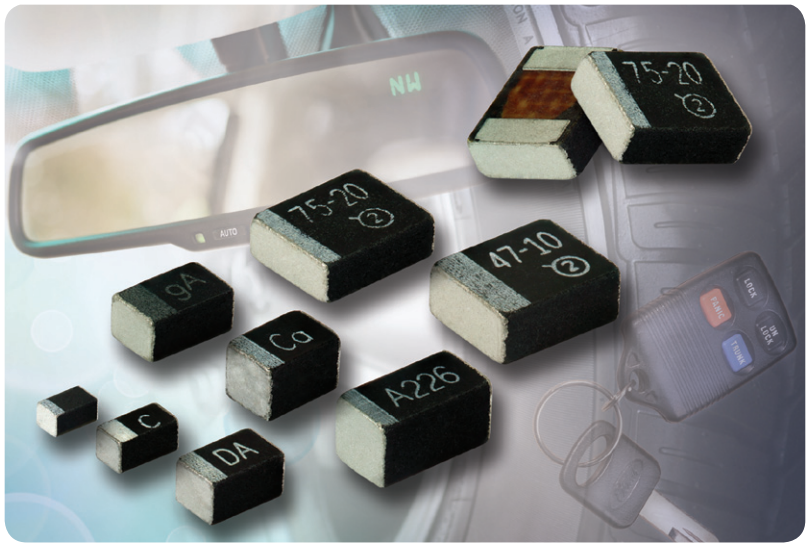
TANTALUM CAPACITORS

TP8 Series

Capacitors - Automotive Grade, Solid Tantalum Chip

MICROTAN®, High CV Lead-frameless Molded Automotive Grade, Solid Tantalum Chip Capacitor



KEY BENEFITS

- Highest volumetric efficiency available in industry enables industry-best ratings such as:
  - 100 µF 6.3 V in EIA standard 1206 package
  - 1 µF 20 V in EIA standard 0603 package
- Small sizes include 0603 package
- Low DC current leakage available for battery powered applications (0.005 CV)
- Lead (Pb)-free L-shaped terminations
- AEC-Q200 qualified

APPLICATIONS

- Bulk capacitance/energy storage
- Filtering
- Decoupling

RESOURCES

- Datasheet: TP8 Series - www.vishay.com/doc?40151
- For technical questions contact tantalum@vishay.com
- Material categorization: For definitions of compliance please see http://www.vishay.com/doc?99912

Pb-free RoHS COMPLIANT GREEN (5-2008)

One of the World's Largest Manufacturers of Discrete Semiconductors and Passive Components

MICROTAN®, High CV Lead-frameless Molded Automotive Grade, Solid Tantalum Chip Capacitor

PERFORMANCE/ELECTRICAL CHARACTERISTICS

Operating Temperature: - 55 °C to + 85 °C
(to + 125 °C, with voltage derating)

Capacitance Range: 1.0 µF to 100 µF
Capacitance Tolerance: ± 10 %, ± 20 %
Voltage Rating: 6 V_{DC} to 40 V_{DC}

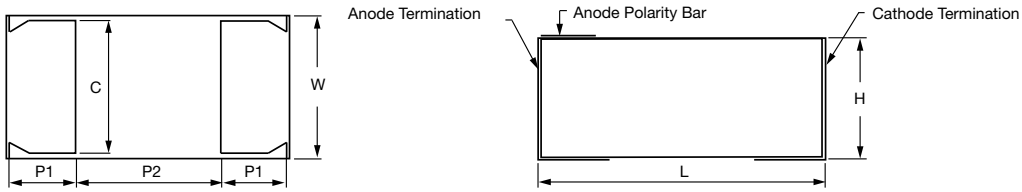
ORDERING INFORMATION

TP8	A	107	M	010	C
TYPE	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	TERMINATION/ PACKAGING
	See Ratings and Case Codes table.	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	**K = ± 10 %** **M = ± 20 %**	This is expressed in V. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 V).	**C = 100 % tin 7" [178 mm] reel** A = Gold/7" [178 mm] reel

Note

- We reserve the right to supply higher voltage ratings and tighter capacitance tolerance capacitors in the same case size. Voltage substitutions will be marked with the higher voltage rating.

DIMENSIONS in inches [millimeters]



CASE CODE	L	W	H (MAX.)	P1	P2 (REF.)	C
M	0.063 ± 0.008 [1.60 ± 0.2]	0.033 ± 0.008 [0.85 ± 0.2]	0.035 [0.9]	0.020 ± 0.004 [0.50 ± 0.1]	0.024 [0.60]	0.024 ± 0.004 [0.60 ± 0.1]
P	0.094 ± 0.004 [2.4 ± 0.1]	0.057 ± 0.004 [1.45 ± 0.1]	0.047 [1.2]	0.020 ± 0.004 [0.50 ± 0.1]	0.057 [1.40]	0.035 ± 0.004 [0.90 ± 0.1]
A	0.126 ± 0.008 [3.2 ± 0.2]	0.063 ± 0.008 [1.6 ± 0.2]	0.071 [1.8]	0.031 ± 0.004 [0.80 ± 0.1]	0.063 [1.60]	0.047 ± 0.004 [1.20 ± 0.1]
B	0.138 ± 0.008 [3.5 ± 0.2]	0.112 ± 0.008 [2.8 ± 0.2]	0.08 [2.0]	0.031 ± 0.008 [0.80 ± 0.2]	0.077 [1.95]	0.094 ± 0.004 [2.4 ± 0.1]
W	0.079 ± 0.008 [2.00 ± 0.2]	0.050 ± 0.008 [1.25 ± 0.2]	0.048 [1.2]	0.020 ± 0.004 [0.50 ± 0.1]	0.040 [1.00]	0.035 ± 0.004 [0.90 ± 0.1]
R	0.081 ± 0.008 [2.05 ± 0.2]	0.053 ± 0.008 [1.35 ± 0.2]	0.063 [1.6]	0.020 ± 0.004 [0.50 ± 0.1]	0.043 [1.1]	0.035 ± 0.004 [0.9 ± 0.1]

RATINGS AND CASE CODES

µF	6.3 V	10 V	16 V	20 V	25 V	40 V
1.0		M	M	M/W	R	P
2.2			M			
4.7	M	M				
6.8		W		B		
10	M	R	R			
15	M	R				
22		A				
47		B				
100	A					

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