INNOVATION AND TECHNOLOGY
50 years
1962-2012

Capacitors - Robust Designs, High-reliability, Small Case Sizes

TM8 High Reliability Tantalum Capacitor
Ideal for Medical, Military, and Space Applications

KEY BENEFITS

- Robust designs - ensuring the highest possible reliability
- Tailorable high-reliability screening options – select the right screening regiment for your application needs
- Low DCL - efficient operation and long battery life
- Small case sizes – ideal for space constrained applications
- Dedicated production facility with highly skilled staff to ensure quality in all phases of production
- Leverages Vishay's patented MICROTAN™ packaging technology for best-in-class performance

APPLICATIONS

- Avionics, military, and space
- Medical implantable devices (pacemakers, ICDs, neurological stimulators)
- Medical instrumentation

RESOURCES

- Datasheet: http://www.vishay.com/doc?40133
- Tantalum product portfolio: http://www.vishay.com/capacitors/tantalum/
- Reliability calculator: http://www.vishay.com/capacitors/tantalum/capacitors/tantalum/tantalum-wet/ tantalum-reliability-calculator-list/
- Technical questions: contact tantalum@vishay.com
- Sales contacts: http://www.vishay.com/doc?99914

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

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RATINGS AND CASE CODES

µF	2 V	4 V	6.3 V	10 V	16 V	20 V	25 V	40 V
1.0				M	M	M/W	R	P
2.2					M			
3.3				M		R		
4.7				M			P	
7.5				W		N		
10	K	K	M	R	R			
15		M		R				
22				A				
47				T				

ORDERING INFORMATION

TM8	R	106	M	016	E	B	A
MODEL	CASE CODE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	TERMINATION/ PACKAGING	RELIABILITY LEVEL	SURGE CURRENT
	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 volts. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 V).	**E = Sn/Pb solder/ 7" (178 mm) reels** L = Sn/Pb solder/ 7" (178 mm) reels, ½ reel R = Sn/Pb solder/ 7" (178 mm) 300 pcs. qty. C = 100 % tin/ 7" (178 mm) reels H = 100 % tin/ 7" (178 mm) reels, ½ reel U = 100 % tin/ 7" (178 mm) 300 pcs. qty.	**B = 0.1 % weibull FRL** S = Hi-Rel std. (40 h burn-in) Z = Non-established reliability	**A = 10 cycles at 25 °C** B = 10 cycles at - 55 °C/+ 85 °C Z = None

Note
• Standard options are in bold

DIMENSIONS in inches [millimeters]

Anode Termination   Anode Polarity Bar   Cathode Termination
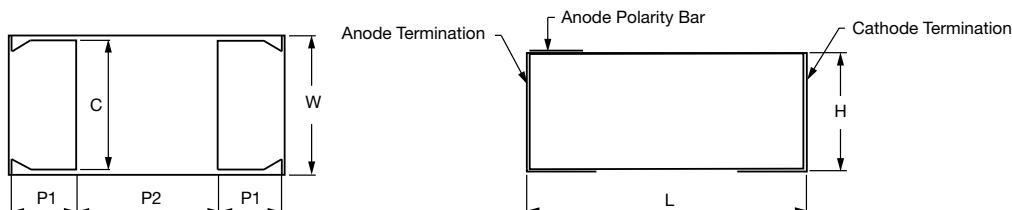
CASE CODE	L	W	H	P1	P2 (REF.)	C
K	0.045 ± 0.002 [1.14 ± 0.05]	0.026 ± 0.002 [0.66 ± 0.05]	0.024 max. [0.61 max.]	0.010 ± 0.004 [0.25 ± 0.1]	0.020 min. [0.51 min.]	0.015 ± 0.004 [0.38 ± 0.1]
M	0.063 ± 0.006 [1.60 ± 0.15]	0.033 ± 0.006 [0.84 ± 0.15]	0.033 ± 0.006 [0.84 ± 0.15]	0.020 ± 0.004 [0.51 ± 0.1]	0.019 min. [0.48 min.]	0.024 ± 0.004 [0.61 ± 0.1]
W	0.081 ± 0.006 [2.06 ± 0.15]	0.053 ± 0.006 [1.35 ± 0.15]	0.047 max. [1.2 max.]	0.020 ± 0.004 [0.51 ± 0.1]	0.028 min. [0.71 min.]	0.035 ± 0.004 [0.90 ± 0.1]
R	0.081 ± 0.006 [2.06 ± 0.15]	0.053 ± 0.006 [1.35 ± 0.15]	0.058 ± 0.004 [1.47 ± 0.10]	0.020 ± 0.004 [0.51 ± 0.1]	0.028 min. [0.71 min.]	0.035 ± 0.004 [0.90 ± 0.1]
P	0.096 ± 0.006 [2.45 ± 0.15]	0.059 ± 0.006 [1.5 ± 0.15]	0.049 max. [1.25 max.]	0.020 ± 0.004 [0.51 ± 0.1]	0.043 min. [1.1 min.]	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 [0.8 ± 0.1]	0.063 min. [1.60 min.]	0.047 ± 0.004 [1.2 ± 0.1]
N	0.138 ± 0.004 [3.5 ± 0.1]	0.110 ± 0.004 [2.80 ± 0.1]	0.047 max. [1.2 max.]	0.0335 ± 0.004 [0.85 ± 0.1]	0.065 min. [1.65 min.]	0.094 ± 0.004 [2.4 ± 0.1]
T	0.138 + 0.004/- 0.008 [3.505 + 0.101/- 0.203]	0.110 ± 0.004 [2.80 ± 0.10]	0.063 max. [1.57 max.]	0.031 + 0.004/- 0.006 [0.80 + 0.1/- 0.15]	0.088 ± 0.010 [2.24 ± 0.25]	0.091 + 0.009/- 0.001 [2.3 + 0.23/- 0.025]