

## 75 V Rated Tantalum Capacitors Industrial-Grade



### KEY BENEFITS

- Highest available capacitance and voltage
- Ultra-low ESR as low as 0.015  $\Omega$
- State-of-the-art CV in a wide variety of case sizes
- Tin/lead (Sn/Pb) terminations standard; 100 % tin available

### APPLICATIONS

- Power management
- Industrial automation and control systems
- Commercial avionics

### RESOURCES

- Datasheet: <http://www.vishay.com/doc?40047>
- 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](mailto:contact_tantalum@vishay.com)
- Sales contacts: <http://www.vishay.com/doc?99914>
- Material categorization: For definitions of compliance please see <http://www.vishay.com/doc?99912>



**RoHS**  
COMPLIANT

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



ORDERING INFORMATION						
597D	687	X0	6R3	E	2	T
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	CASE CODE	TERMINATION	REEL SIZE AND PACKAGING
	This is expressed in pF. The first two digits are the significant figures. The third is the number of zeros to follow.	<b>X0 = ± 20 %</b> <b>X9 = ± 10 %</b>	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).	See Ratings and Case Codes table	<b>2 = 100 % tin</b> <b>8 = Solder plated (60/40) special order</b>	<b>T = Tape and reel</b> <b>7" [178 mm] reel</b>

**Note**

- Preferred tolerance and reel sizes are in bold.
- We reserve the right to supply higher voltage ratings and tighter capacitance tolerance capacitors in the same case size.

DIMENSIONS in inches [millimeters]							
CASE CODE	L (MAX.)	W	H	A	B	D (REF.)	J (MAX.)
V	0.299 [7.6]	0.173 ± 0.016 [4.4 ± 0.4]	0.079 [2.0 max.]	0.051 ± 0.012 [1.3 ± 0.3]	0.181 ± 0.024 [4.6 ± 0.6]	0.252 [6.4]	0.004 [0.1]
D	0.299 [7.6]	0.173 ± 0.016 [4.4 ± 0.4]	0.138 [3.5 max.]	0.051 ± 0.012 [1.3 ± 0.3]	0.181 ± 0.024 [4.6 ± 0.6]	0.252 [6.4]	0.004 [0.1]
E	0.299 [7.6]	0.173 ± 0.016 [4.4 ± 0.4]	0.157 ± 0.016 [4.0 ± 0.4]	0.051 ± 0.012 [1.3 ± 0.3]	0.181 ± 0.024 [4.6 ± 0.6]	0.252 [6.4]	0.004 [0.1]
R	0.299 [7.6]	0.238 ± 0.016 [6.0 ± 0.4]	0.142 ± 0.016 [3.6 ± 0.4]	0.051 ± 0.012 [1.3 ± 0.3]	0.181 ± 0.024 [4.6 ± 0.6]	0.244 [6.2]	0.004 [0.1]
F	0.299 [7.6]	0.238 ± 0.016 [6.0 ± 0.4]	0.185 ± 0.016 [4.7 ± 0.4]	0.055 ± 0.016 [1.4 ± 0.4]	0.181 ± 0.024 [4.6 ± 0.6]	0.244 [6.2]	0.004 [0.1]
Z	0.299 [7.6]	0.238 ± 0.016 [6.0 ± 0.4]	0.236 ± 0.016 [6.0 ± 0.4]	0.055 ± 0.016 [1.4 ± 0.4]	0.181 ± 0.024 [4.6 ± 0.6]	0.244 [6.2]	0.004 [0.1]
M	0.315 [8.0]	0.260 + 0.016/- 0.024 [6.6 + 0.4/- 0.6]	0.142 ± 0.016 [3.6 ± 0.4]	0.051 ± 0.012 [1.3 ± 0.3]	0.197 ± 0.024 [5.0 ± 0.6]	0.260 [6.6]	0.004 [0.1]
H	0.315 [8.0]	0.260 + 0.016/- 0.024 [6.6 + 0.4/- 0.6]	0.205 ± 0.016 [5.2 ± 0.4]	0.055 ± 0.016 [1.4 ± 0.4]	0.197 ± 0.024 [5.0 ± 0.6]	0.260 [6.6]	0.004 [0.1]

**Note**

- The anode termination (D less B) will be a minimum of 0.012" [0.3 mm]

RATINGS AND CASE CODES										
μF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V	63 V	75 V
10									D	R
15								E/R	R	
22								R	F	
33								F		
47							R	Z		
68						R	F			
100						F	F			
150						F				
220				E	R	M				
330		V	E	F	H					
470	V	E	E	H						
680	E	E	R							
1000	E/R	R	F							
1500	R									
2200										