

⚡ Tantalum Capacitors

Small Size,
High Capacitance

T58
MICROTAN® POLYMER

Tantalum Metal Case,
Hermetic Package Design

T22
WET TANTALUM SMD

Low ESR,
Polymer Capacitor

T55 POLYMER

High Energy / Bulk Capacitance,
Low Profile

T52
LEADFRAMELESS
POLYMER

High Capacitance,
High Performance

T18
WET TANTALUM

High Performance,
Vishay Automotive Grade

TP3 MOLDED
TANTALUM

Ultra Low ESR,
High Capacitance

T59
LEADFRAMELESS
POLYMER

Highest Capacitance
Available in SMD Tantalum

597D
CONFORMAL-
COATED TANTALUM

TANTALUM CAPACITORS

Focus Products

Polymer Chip Capacitors

Series	Capacitance Range	Voltage Range	ESR	Case Sizes	Operating Temperature
 T55	3.3 μ F to 1000 μ F	2.5 V _{DC} to 63 V _{DC}	6 m Ω to 500 m Ω	1608, 2012, 3216, 3528, 7343-30, 7343-20, 7343-19	-55 °C to +105 °C
Polymer cathode system offers low ESR and eliminates ignition failure mode					

Leadframeless Polymer Capacitors

Series	Capacitance Range	Voltage Range	ESR	Case Sizes	Operating Temperature
 T52	47 μ F to 1500 μ F	6.3 V _{DC} to 35 V _{DC}	25 m Ω to 100 m Ω	7343-15, 7360-20	-55 °C to +105 °C
High energy polymer capacitor; low profile					
 T58	1 μ F to 330 μ F	4 V _{DC} to 35 V _{DC}	50 m Ω to 500 m Ω	1608 to 3528	-55 °C to +105 °C
Smallest and lowest profile polymer tantalum capacitor; best-in-class ESR					
 T59	15 μ F to 470 μ F	16 V _{DC} to 75 V _{DC}	25 m Ω to 150 m Ω	7343-43	-55 °C to +105 °C
Extended capacitance and voltage range; ultra low ESR					

MicroTan® Capacitors

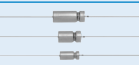
Series	Capacitance Range	Voltage Range	Case Sizes	Operating Temperature
 TP8	1.0 μ F to 100 μ F	6.3 V _{DC} to 40 V _{DC}	1608 up to 3528	-55 °C to +125 °C
AEC-Q200 qualified micro tantalum chip capacitors for space-constrained automotive applications				
 TM8	0.68 μ F to 47 μ F	2 V _{DC} to 40 V _{DC}	1005 up to 3528	-55 °C to +125 °C
High reliability micro tantalum chip capacitors for military and medical applications; ISO 13485 qualified				

TANTAMOUNT® Solid Tantalum Surface-Mount Chip Capacitors

Series	Qualification	Capacitance Range	Voltage Range	Case Size	Operating Temperature
 TP3	AEC-Q200	0.10 μ F to 470 μ F	4 V _{DC} to 50 V _{DC}	A to E	-55 °C to +125 °C
Molded case; high performance; Vishay Automotive Grade					
 TH3	AEC-Q200	0.33 μ F to 220 μ F	6.3 V _{DC} to 50 V _{DC}	A to E	-55 °C to +150 °C
Molded case; high temperature to 150 °C; Vishay Automotive Grade					
 TH4	AEC-Q200	10 μ F to 47 μ F	6.3 V _{DC} to 16 V _{DC}	B, C, and D	-55 °C to +175 °C
Molded case; high temperature to 175 °C; Vishay Automotive Grade					
 TM3	ISO 13485	1 μ F to 220 μ F	4 V _{DC} to 20 V _{DC}	A to E	-55 °C to +125 °C
Molded case; high reliability; low DCL for medical instruments					
 T83	RoHS available	0.10 μ F to 470 μ F	4 V _{DC} to 63 V _{DC}	A to E	-55 °C to +125 °C
Molded case; Hi-Rel COTS					
 TL3	EIA 717	0.10 μ F to 470 μ F	4 V _{DC} to 50 V _{DC}	A to E	-55 °C to +125 °C
Molded case; very low DCL					
 TR3	EIA 717	0.47 μ F to 1000 μ F	4 V _{DC} to 75 V _{DC}	A to E, V, and W	-55 °C to +125 °C
Molded case; low ESR					
 TH5		4.7 μ F and 10 μ F	21 V _{DC} and 24 V _{DC}	E	-55 °C to +200 °C
Molded case; HI-TMP®; very high temperature 200 °C					

TANTALUM CAPACITORS

Focus Products

Wet Tantalum Capacitors							
Series		Qualification	Capacitance Range	Voltage Range	Case Size	Operating Temperature	Termination Style
	STE	DLA 10004	18 μF to 10 000 μF	10 V _{DC} to 125 V _{DC}	T1, T2, T3, T4	-55 °C to +125 °C	Axial leaded
	Tantalum case; extended capacitance						
	T16	DLA 13017	10 μF to 1800 μF	25 V _{DC} to 125 V _{DC}	T1, T2, T3, T4	-55 °C to +125 °C	Axial leaded
	Tantalum case; high capacitance; high performance						
	T18	DLA 15005	10 μF to 2200 μF	50 V _{DC} to 125 V _{DC}	T1, T2, T3, T4	-55 °C to +125 °C	Axial leaded
	Tantalum case; extended capacitance; high performance						
	T34		10 μF to 1500 μF	50 V _{DC} to 125 V _{DC}	A, B, C, D	-55 °C to +200 °C	Axial leaded
	Tantalum case; high capacitance; high temperature						
	EP1		2000 μF to 79 000 μF	25 V _{DC} to 125 V _{DC}	A, B, C	-55 °C to +125 °C	Rectangular leaded
	Tantalum case; ultra high capacitance; high energy						
	HE5		1100 μF to 72 000 μF	25 V _{DC} to 125 V _{DC}	A, B, C	-55 °C to +125 °C	Radial leaded
	Tantalum case; ultra high capacitance; high energy; low ESR						

Conformal Coated						
Series		Capacitance Range	Voltage Range	ESR	Case Sizes	Operating Temperature
	597D, Hi-Rel COTS T97	10 μ F to 1500 μ F	4 V _{DC} to 75 V _{DC}	18 m Ω to 100 m Ω	7.6 mm x 4.4 mm 7.6 mm x 6 mm 8.0 mm x 6 mm height: 2 mm up to 6 mm	-55 °C to +125 °C
	Highest capacitance and voltages available in SMD tantalum; Hi-Rel COTS T97 also available as DLA 13008					
	595D, Low-ESR 594D	0.1 μ F to 1500 μ F	4 V _{DC} to 50 V _{DC}	0.03 Ω to 10 Ω	2.2 mm x 1.1 mm up to 7.2 mm x 6.0 mm	-55 °C to +125 °C
	Wide range of capacitance and voltages; low ESR 594D					
	Hi-Rel COTS T95	0.1 μ F to 1500 μ F	4 V _{DC} to 50 V _{DC}	0.03 Ω to 10 Ω	2.2 mm x 1.1 mm up to 7.2 mm x 6.0 mm	-55 °C to +125 °C
	High reliability version of 595D / 594D series; also available as DLA 14002					
	Low Profile 592D	1 μ F to 2200 μ F	4 V _{DC} to 50 V _{DC}	0.04 Ω to 8 Ω	2.2 mm x 1.1 mm 14.5 mm x 7.4 mm height: 2 mm and below	-55 °C to +125 °C
	Low profile; maximum capacitance					

Hermetic Solid Tantalum Surface-Mount Chip Capacitors						
Series		Capacitance Range	Voltage Range	ESR	Case Sizes	Operating Temperature
	T25	22 μ F to 330 μ F	16 V _{DC} to 50 V _{DC}	180 m Ω to 500 m Ω	D	-55 $^{\circ}$ C to +125 $^{\circ}$ C
	Metal case; hermetically sealed; SMD; solid tantalum; low ESR					

Hermetic Wet Tantalum Surface-Mount Chip Capacitors						
Series		Capacitance Range	Voltage Range	ESR	Case Sizes	Operating Temperature
	T22	10 μF to 68 μF	50 V _{DC} to 125 V _{DC}	1.5 Ω to 5.5 Ω	C	-55 °C to +125 °C
	Tantalum case; hermetically sealed; SMD; enhanced performance; high reliability					

Tantalum Capacitors Offer Stable Performance and Reliability for the Most Demanding Applications



Advantages of Vishay Tantalum Capacitors

- Stable performance over operating temperature, voltage range, and life (no wear-out)
- Specialized for key applications: commercial, industrial, military, medical, automotive, and space
- Wide range of capacitance and voltages
- Large selection of styles and sizes

For the Following Applications

- Power conversion and distribution
- Energy storage, bulk capacitance
- Filtering



When reliability and performance are critical, Vishay's tantalum capacitors deliver!

AEC-Q200 qualified tantalum capacitors are the industry's choice for high capacitance solutions in automotive applications



- FIT Calculator Program
www.vishay.com/capacitors/tantalum-reliability-calculator-list/
- Solid Tantalum Capacitors Selector Guide
www.vishay.com/doc?49053
- Tantalum SPICE Program
www.vishay.com/ref/vita-spice

Market and technology leader in conformal-coated tantalum capacitors

**HALOGEN
FREE**

**RoHS
COMPLIANT**

**AEC-Q200
QUALIFIED**

**ISO 13485
EIA-717
DLA
MIL-PRF**



**AUTOMOTIVE
GRADE**

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