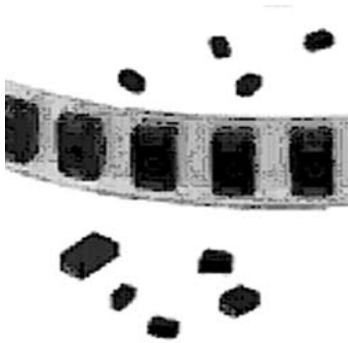


Type T495 Solid Tantalum Chip Capacitors

Low ESR, High Ripple Current, Solid Tantalum Chip Capacitors



Highlights

- ♦ Designed for very low ESR
- ♦ High ripple current capability
- ♦ High surge current capability
- ♦ Taped and reeled per EIA RS 481-1
- ♦ Low ESL (<2.5 nH ESL)
- ♦ High operating temperature +125 °C

Like the T491 standard tantalum capacitors the Type T495's physical outline and dimensions conform to the global standard for tantalum capacitor chips and exceed the requirements for EIA standard 535BAAC, but performance sets the T495 apart. The very low ESR, high ripple current capability, capacitance stability, and ability to withstand high inrush currents makes the T495 ideal for output filtering in switch-mode power supplies and DC-DC converters and in battery-stiffening filters. This capability is from unique design and high-stress, low impedance electrical conditioning. Reliability and thermal stability are assured by lead-frame attachments to the tantalum pellet made by microprocessor-controlled welding and high temperature silver epoxy adhesive. Standard packaging is compatible with all tape-fed placement units and with EIA 481-1 tape and reel specifications

Specifications

Capacitance Range: 4.7 μ F to 470 μ F

Tolerance: $\pm$ 10% standard, $\pm$ 20% available

Voltage Range: 6 Vdc to 50 Vdc

Operating Temperature: -55 °C to +125 °C (with proper derating)

Cap Change From Initial Limit: -10% @ -55 °C; +10% @ +85 °C
+12% @ +125 °C

DC Leakage: At 25 °C — See Ratings
At 85 °C — 10 x 25 °C Limit
At 125 °C — 12 x 25 °C Limit

Dissipation Factor: 0.1 μ F to 1.0 μ F — 4%
1.5 μ F to 68 μ F — 6%
100 μ F to 220 μ F — 8%

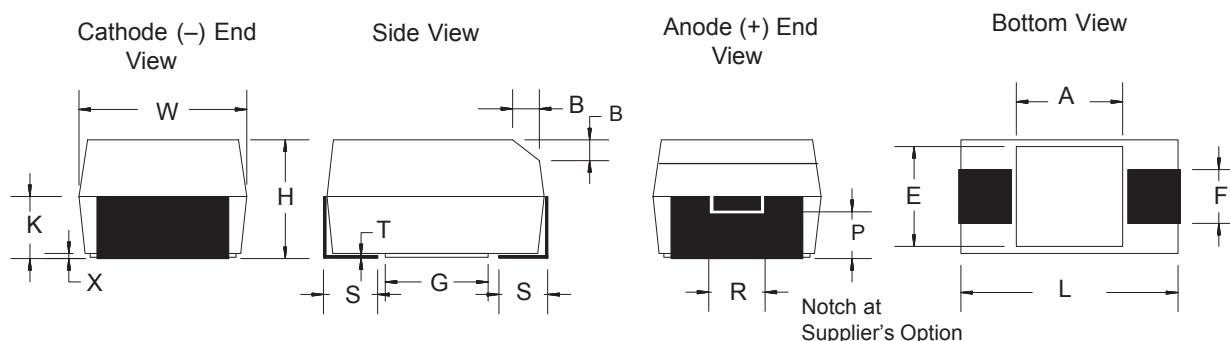
Standard Packaging Tape and Reel: EIA RS-481-1

Case Code	EIA IECQ	Qty per 7" Reel	Tape	
			Width	Pitch
D	7343	500	12mm	8mm
X	7343H	500	12mm	8mm
V	7343L	2,500	8mm	4mm

13" Reels Available on Special Order

Type T495 Solid Tantalum Chip Capacitors

Capacitor Outline Drawing



Dimensions ————— Millimeters (Inches)

EIA/		B		X		P		R		T		A		G		E	
CDE	IECQ	L	W	H	K	F	S	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Min)	(Ref)	(Ref)	(Ref)	(Ref)
D	7343-31	7.3 ± 0.3 (.287 ± .012)	4.3 ± 0.3 (.169 ± .012)	2.8 ± 0.3 (.110 ± .012)	1.5 ± 0.2 (.059 ± .008)	2.4 ± 0.1 (.094 ± .004)	1.3 ± 0.3 (.051 ± .012)	0.5 ± 0.15 (.020 ± .006)	0.10 ± 0.10 (.004 ± .004)	0.9 (0.035)	1 (0.039)	0.13 (0.005)	3.8 (0.150)	3.5 (0.138)	3.5 (0.138)		
X	7343-43	7.3 ± 0.3 (.287 ± .012)	4.3 ± 0.3 (.169 ± .012)	4.0 ± 0.3 (.157 ± .012)	2.3 ± 0.2 (.091 ± .008)	2.4 ± 0.1 (.094 ± .004)	1.3 ± 0.3 (.051 ± .012)	0.5 ± 0.15 (.020 ± .006)	0.10 ± 0.10 (.004 ± .004)	1.7 (0.067)	1 (0.039)	0.13 (0.005)	3.8 (0.150)	3.5** (0.138)	3.5** (0.138)		

Notes: 1 Metric dimensions govern
2 (Ref) - Dimensions provided for reference only
** Round Glue Pad 2.9 ± 0.1mm (.114 ± .004) in diameter at Supplier's option

Low Profile Capacitor Dimensions ————— Millimeters (Inches)

EIA/								X	T	A	G	E
CDE	IECQ	L	W	H Max.	K Min.	F ±0.1	S ±0.3	(Ref)	(Ref)	(Min)	(Ref)	(Ref)
V	7343-20	7.3 ±0.3	4.3 ±0.3	2.0	1.1	2.4	1.3	0.05	0.13	3.8	3.5	3.5
		(.287 ±0.012)	(.169 ±0.012)	(0.079)	(0.043)	(0.094)	(0.051)	(0.002)	(0.005)	(.150)	(0.138)	(0.138)

Notes: 1 Metric dimensions govern
2 (Ref) - Dimensions provided for reference only
3 No dimensions provided for B, P or R because low profile cases do not have a bevel or notch

Part Numbering System —————

T495	D	685	K	035	A	S
Series	Case	Capacitance	Tolerance	Voltage	Failure Rate Level	Termination Plating
T495	D X V	685 = 6.8 µF 226 = 22 µF 227 = 220 µF	K = ±10% M = ±20%	006 = 6 Vdc 035 = 35 Vdc	A = Not Applicable	S = Tin-Lead (Sn/Pb) T = 100% Matte Tin

Type T495 Solid Tantalum Chip Capacitors

Ratings

Cap (μF)		Cap Tol.	Case Code		Catalog Part Number	Max DC Leakage	Max DF	Max ESR	Max Amps
			CDE	EIA IECQ		@ 25 °C (μA)	@ 25 °C 120 Hz (%)	@ 25 °C 100 kHz (Ω)	@ 25 °C 100 kHz (A)
6/6.3 WVdc @ +85 °C (4 WVdc @ 125 °C)									
68	10%	D	7343	T495D686K006AS	3.3	4	0.175	0.9	
100	10%	V	7343L	T495V107K006AS	6.0	8	0.150	0.9	
150	10%	X	7343H	T495X157K006AS	7.2	6	0.100	1.3	
220	10%	D	7343	T495D227K006AS	13.2	8	0.100	1.2	
220	10%	X	7343H	T495X227K006AS	13.2	8	0.100	1.3	
330	10%	X	7343H	T495X337K006AS	19.8	8	0.100	1.3	
470	10%	X	7343H	T495X477K006AS	28.2	10	0.065	1.6	
10 WVdc @ +85 °C (7 WVdc @ 125 °C)									
47	10%	D	7343	T495D476K010AS	3.8	4	0.20	0.9	
68	10%	D	7343	T495D686K010AS	6.8	6	0.15	1.0	
68	10%	X	7343H	T495X686K010AS	5.4	4	0.15	1.1	
100	10%	D	7343	T495D107K010AS	10.0	8	0.10	1.2	
100	10%	X	7343H	T495X107K010AS	8.0	6	0.10	1.3	
150	10%	D	7343	T495D157K010AS	15.0	8	0.10	1.2	
150	10%	X	7343H	T495X157K010AS	15.0	8	0.10	1.3	
220	10%	X	7343H	T495X227K010AS	22.0	8	0.10	1.3	
16 WVdc @ +85 °C (10 WVdc @ 125 °C)									
33	10%	D	7343	T495D336K016AS	4.2	4	0.225	0.8	
47	10%	D	7343	T495D476K016AS	7.5	6	0.150	1.0	
100	10%	D	7343	T495D107K016AS	16.0	8	0.125	1.1	
100	10%	X	7343H	T495X107K016AS	16.0	8	0.100	1.3	
20 WVdc @ +85 °C (13 WVdc @ 125 °C)									
15	10%	D	7343	T495D156K020AS	2.4	4	0.275	0.7	
22	10%	D	7343	T495D226K020AS	3.5	4	0.225	0.8	
33	10%	D	7343	T495D336K020AS	6.6	6	0.200	0.9	
47	10%	X	7343H	T495X476K020AS	7.5	4	0.150	1.0	
68	10%	X	7343H	T495X686K020AS	13.6	6	0.150	1.0	
25 WVdc @ +85 °C (17 WVdc @ 125 °C)									
15	10%	D	7343	T495D156K025AS	3.8	6	0.275	0.7	
15	10%	X	7343H	T495X156K025AS	3.0	4	0.200	0.9	
22	10%	D	7343	T495D226K025AS	5.5	6	0.200	0.9	
22	10%	X	7343H	T495X226K025AS	4.4	4	0.225	0.9	
33	10%	X	7343H	T495X336K025AS	6.6	4	0.175	1.0	
35 WVdc @ +85 °C (23 WVdc @ 125 °C)									
6.8	10%	X	7343H	T495X685K035AS	1.9	4	0.300	0.7	
10	10%	D	7343	T495D106K035AS	3.5	6	0.300	0.7	
10	10%	X	7343H	T495X106K035AS	2.8	4	0.250	0.8	
15	10%	D	7343	T495D156K035AS	5.3	6	0.300	0.7	
15	10%	X	7343H	T495X156K035AS	5.3	6	0.225	0.9	
22	10%	X	7343H	T495X226K035AS	7.7	6	0.275	0.8	
50 WVdc @ +85 °C (33 WVdc @ 125 °C)									
4.7	10%	X	7343H	T495X475K050AS	1.9	4	0.300	0.7	

Note: CDE reserves the right to offer higher rated voltage substitutes within the same case size. The marking will indicate the higher voltage.