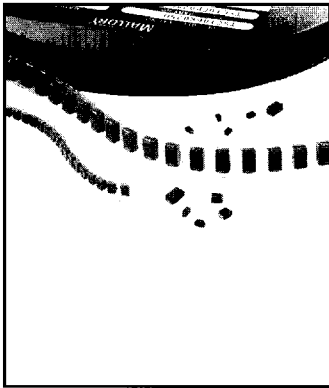


Type TSC - Chips Solid Tantalum Capacitors



- Highest Capacitance per Case
- Low DF and DC Leakage
- Temperature Stable
- Compatible with all Soldering Techniques
- Soldering Temperature up to 260°C for 10 Seconds
- Meets IECQ Standard QC300801/US0001 and EIA Standard 535BAAC
- Compatible with all Tape-Fed Automatic Pick and Place Systems

GENERAL SPECIFICATIONS

Operating Temperature: -55°C to +125°C
 Voltage Range: 4 to 50 VDC
 Capacitance Range: 0.10 μ F to 150 μ F
 Cap Change From Initial Limit
 -10% @ -55°C; +10% @ +85°C
 +12% @ +125°C
 DC Leakage:
 At 25°C - .01 μ A/CV or .5 μ A, whichever is greater
 At 85°C - 10 x 25°C Limit
 At 125°C - 2 x 25°C Limit

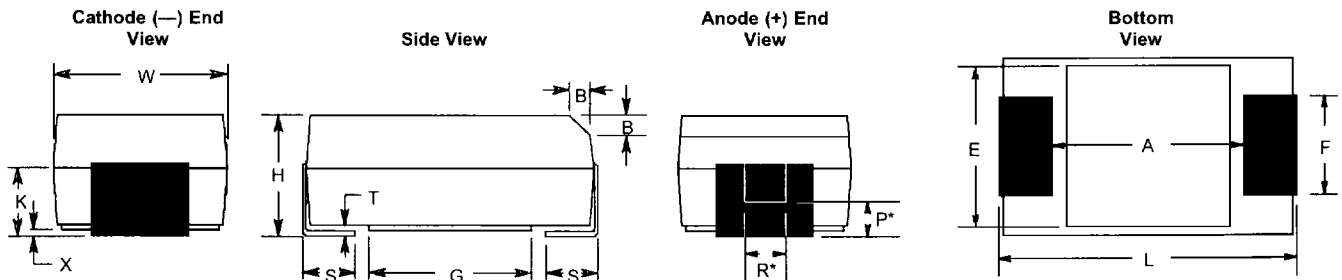
Dissipation Factor:
 .1 μ F to 1.0 μ F — 4%
 1.5 μ F to 68 μ F — 6%
 100 μ F to 150 μ F — 8%

Standard Packaging
 Tape & Reel per EIA RS-481-1

Case Code	EIA/IECQ	Qty per Reel	Tape	
			Width	Pitch
A	3216	2,000	8mm	4mm
B	3528	2,000	8mm	4mm
C	6032	500	12mm	8mm
D	7343	500	12mm	8mm

13" Reels Available on Special Order

Capacitor Outline Drawing



* Notch at Supplier's Option

Case Code		Dimensions Millimeters (Inches)													
Mallory	EIA/IECQ	L	W	H	K	F	S	B	X (Ref)	P (Ref)	R (Ref)	T (Ref)	A (Min)	G (Ref)	E (Ref)
A	3216	3.2 ± 0.2 (.126 ± .008)	1.6 ± 0.2 (.063 ± .008)	1.6 ± 0.2 (.063 ± .008)	0.9 ± 0.2 (.035 ± .008)	1.2 ± 0.1 (.047 ± .004)	0.8 ± 0.3 (.031 ± .012)	0.40 ± 0.15 (.016 ± .006)	0.10 ± 0.10 (.004 ± .004)	0.4 (.016)	0.4 (.016)	0.13 (.005)	0.8 (.031)	1.4 (.055)	1.3 (.051)
B	3528	3.5 ± 0.2 (.138 ± .008)	2.8 ± 0.2 (.110 ± .008)	1.9 ± 0.2 (.075 ± .008)	1.1 ± 0.2 (.043 ± .008)	2.2 ± 0.1 (.087 ± .004)	0.8 ± 0.3 (.031 ± .012)	0.40 ± 0.15 (.016 ± .006)	0.10 ± 0.10 (.004 ± .004)	0.5 (.020)	1.0 (.039)	0.13 (.005)	1.1 (.043)	1.8 (.071)	2.5 (.098)
C	6032	6.0 ± 0.3 (.236 ± .012)	3.2 ± 0.3 (.126 ± .012)	2.5 ± 0.3 (.098 ± .012)	1.4 ± 0.2 (.055 ± .008)	2.2 ± 0.1 (.087 ± .004)	1.3 ± 0.3 (.051 ± .012)	0.50 ± 0.15 (.020 ± .006)	0.10 ± 0.10 (.004 ± .004)	0.9 (.035)	1.0 (.039)	0.13 (.005)	2.5 (.098)	2.8 (.110)	2.9 (.114)
D	7343	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)	0.50 ± 0.15 (.020 ± .006)	0.10 ± 0.10 (.004 ± .004)	0.9 (.035)	1.0 (.039)	0.13 (.005)	3.8 (.150)	4.0 (.157)	3.9 (.154)

Surface Mount Capacitors

Capacitance μ F	* Cap Tol	Case Code	EIA/IECQ	Catalog Number	DC Leakage μ A @ +25°C Max	DF % @ +25°C 120 Hz Max
---------------------	-----------	-----------	----------	----------------	--------------------------------	-------------------------

4 WVDC @ +85°C (2.7 WVDC @ +125°C)						
2.2	10%	A	3216	TSC225K004A	0.5	6.0
3.3	10%	A	3216	TSC335K004A	0.5	6.0
4.7	10%	A	3216	TSC475K004A	0.5	6.0
+ 6.8	10%	A	3216	TSC685K004A	0.5	6.0
+ 10.0	10%	A	3216	TSC106K004A	0.5	6.0
+ 15.0	10%	B	3528	TSC156K004B	0.6	6.0
+ 22.0	10%	B	3528	TSC226K004B	0.9	6.0
+ 33.0	10%	C	6032	TSC336K004C	1.3	6.0
+ 47.0	10%	C	6032	TSC476K004C	1.9	6.0
+ 68.0	10%	D	7343	TSC686K004D	2.7	6.0
+ 100.0	10%	D	7343	TSC107K004D	4.0	8.0
+ 150.0	10%	D	7343	TSC157K004D	6.0	8.0

6 WVDC @ +85°C (4 WVDC @ +125°C)						
1.5	10%	A	3216	TSC155K006A	0.5	6.0
2.2	10%	A	3216	TSC225K006A	0.5	6.0
3.3	10%	A	3216	TSC335K006A	0.5	6.0

Capacitance μ F	* Cap Tol	Case Code	EIA/IECQ	Catalog Number	DC Leakage μ A @ +25°C Max	DF % @ +25°C 120 Hz Max
---------------------	-----------	-----------	----------	----------------	--------------------------------	-------------------------

6 WVDC @ +85°C (4 WVDC @ +125°C)						
+ 4.7	10%	A	3216	TSC475K006A	0.5	6.0
+ 6.8	10%	A	3216	TSC685K006A	0.5	6.0
10.0	10%	B	3528	TSC106K006B	0.6	6.0
+ 15.0	10%	B	3528	TSC156K006B	0.9	6.0
+ 22.0	10%	C	6032	TSC226K006C	1.4	6.0
+ 33.0	10%	C	6032	TSC336K006C	2.0	6.0
47.0	10%	D	7343	TSC476K006D	2.9	6.0
68.0	10%	D	7343	TSC686K006D	4.1	6.0
+ 100.0	10%	D	7343	TSC107K006D	6.0	8.0

10 WVDC @ +85°C (7 WVDC @ +125°C)						
1.0	10%	A	3216	TSC105K010A	0.5	4.0
1.5	10%	A	3216	TSC155K010A	0.5	6.0
2.2	10%	A	3216	TSC225K010A	0.5	6.0
+ 3.3	10%	A	3216	TSC335K010A	0.5	6.0
+ 4.7	10%	A	3216	TSC475K010A	0.5	6.0
6.8	10%	B	3528	TSC685K010B	0.7	6.0

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

* - ± 20% Tolerance Available by Special Order
 + - Extended Values
 (Ref) - Dimensions provided for reference only

Type TSC - Chips Solid Tantalum Capacitors

MALLORY

Surface Mount Capacitors

Capacitance µF	* Cap Tol	Case Code		Catalog Number	DC Leakage µA @+25°C Max	DF % @ +25°C 120 Hz Max
		M	EIA/ IECQ			

10 WVDC @ +85°C (7 WVDC @ +125°C)						
+ 10.0	10%	B	3528	TSC106K010B	1.0	6.0
15.0	10%	C	6032	TSC156K010C	1.5	6.0
+ 22.0	10%	C	6032	TSC226K010C	2.2	6.0
33.0	10%	D	7343	TSC336K010D	3.3	6.0
47.0	10%	D	7343	TSC476K010D	4.7	6.0
+ 68.0	10%	D	7343	TSC686K010D	6.8	6.0

16 WVDC @ +85°C (10 WVDC @ +125°C)						
0.68	10%	A	3216	TSC684K016A	0.5	4.0
1.0	10%	A	3216	TSC105K016A	0.5	4.0
1.5	10%	A	3216	TSC155K016A	0.5	6.0
+ 2.2	10%	A	3216	TSC225K016A	0.5	6.0
+ 3.3	10%	A	3216	TSC335K016A	0.5	6.0
4.7	10%	B	3528	TSC475K016B	0.8	6.0
+ 6.8	10%	B	3528	TSC685K016B	1.1	6.0
10.0	10%	C	6032	TSC106K016C	1.6	6.0
+ 15.0	10%	C	6032	TSC156K016C	2.4	6.0
22.0	10%	D	7343	TSC226K016D	3.6	6.0
33.0	10%	D	7343	TSC336K016D	5.3	6.0
+ 47.0	10%	D	7343	TSC476K016D	7.5	6.0

20 WVDC @ +85°C (13 WVDC @ +125°C)						
0.47	10%	A	3216	TSC474K020A	0.5	4.0
0.68	10%	A	3216	TSC684K020A	0.5	4.0
1.0	10%	A	3216	TSC105K020A	0.5	4.0
+ 1.5	10%	A	3216	TSC155K020A	0.5	6.0
+ 2.2	10%	A	3216	TSC225K020A	0.5	6.0
3.3	10%	B	3528	TSC335K020B	0.7	6.0
+ 4.7	10%	B	3528	TSC475K020B	1.0	6.0
6.8	10%	C	6032	TSC685K020C	1.4	6.0
+ 10.0	10%	C	6032	TSC106K020C	2.0	6.0
15.0	10%	D	7343	TSC156K020D	3.0	6.0
22.0	10%	D	7343	TSC226K020D	4.4	6.0
+ 33.0	10%	D	7343	TSC336K020D	6.6	6.0

* - ± 20% Tolerance Available by Special Order
 + - Extended Values
 (Ref) - Dimensions provided for reference only

Capacitance µF	* Cap Tol	Case Code		Catalog Number	DC Leakage µA @+25°C Max	DF % @ +25°C 120 Hz Max
		M	EIA/ IECQ			

25 WVDC @ +85°C (17 WVDC @ +125°C)						
0.33	10%	A	3216	TSC334K025A	0.5	4.0
0.47	10%	A	3216	TSC474K025A	0.5	4.0
0.68	10%	B	3528	TSC684K025B	0.5	4.0
1.0	10%	B	3528	TSC105K025B	0.5	4.0
1.5	10%	B	3528	TSC155K025B	0.5	6.0
2.2	10%	C	6032	TSC225K025C	0.6	6.0
3.3	10%	C	6032	TSC335K025C	0.9	6.0
4.7	10%	C	6032	TSC475K025C	1.2	6.0
+ 6.8	10%	C	6032	TSC685K025C	1.7	6.0
10.0	10%	D	7343	TSC106K025D	2.5	6.0
15.0	10%	D	7343	TSC156K025D	3.8	6.0
+ 22.0	10%	D	7343	TSC226K025D	5.5	6.0

35 WVDC @ +85°C (23 WVDC @ +125°C)						
0.10	10%	A	3216	TSC104K035A	0.5	4.0
0.15	10%	A	3216	TSC154K035A	0.5	4.0
0.22	10%	A	3216	TSC224K035A	0.5	4.0
0.33	10%	A	3216	TSC334K035A	0.5	4.0
0.47	10%	B	3528	TSC474K035B	0.5	4.0
0.68	10%	B	3528	TSC684K035B	0.5	4.0
1.0	10%	B	3528	TSC105K035B	0.5	4.0
1.5	10%	C	6032	TSC155K035C	0.5	6.0
2.2	10%	C	6032	TSC225K035C	0.8	6.0
3.3	10%	C	6032	TSC335K035C	1.2	6.0
4.7	10%	D	7343	TSC475K035D	1.7	6.0
6.8	10%	D	7343	TSC685K035D	2.4	6.0
+ 10.0	10%	D	7343	TSC106K035D	3.5	6.0

50 WVDC @ +85°C (33 WVDC @ +125°C)						
0.10	10%	A	3216	TSC104K050A	0.5	4.0
0.15	10%	B	3528	TSC154K050B	0.5	4.0
0.22	10%	B	3528	TSC224K050B	0.5	4.0
0.33	10%	B	3528	TSC334K050B	0.5	4.0
0.47	10%	C	6032	TSC474K050C	0.5	4.0
0.68	10%	C	6032	TSC684K050C	0.5	4.0
1.0	10%	C	6032	TSC105K050C	0.5	4.0
+ 1.5	10%	C	6032	TSC155K050C	0.8	6.0
2.2	10%	D	7343	TSC225K050D	1.1	6.0
3.3	10%	D	7343	TSC335K050D	1.7	6.0
+ 4.7	10%	D	7343	TSC475K050D	2.4	6.0

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