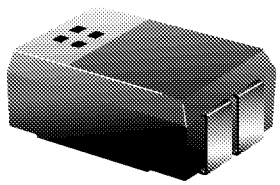
Surface Mount Type Tantalum Solid Electrolytic Capacitors



Series: TE
Type: T

SURFACE MOUNT TYPE

■ Features

- Compact size and wide capacitance range
- Excellent performance in temperature and frequency characteristics
- Excellent solderability
- Excellent terminal construction against bending of P.W.B.
- Low inductance

■ Recommended Applications

- Camcorders, portable telephones, headphone stereos, compact size electronic equipment

■ Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	C	S	T	□	□	□	□	□	□	R	□
Product Code			Style	Rated Working Voltage Code		Size Code	Nominal Capacitance Code			Option	

Rated Working Voltage Code	
0G	4
0J	6.3
1A	10
1C	16
1D	20
1D	25
1V	35

Size Code
Y, X, C, V, D

Example

Nominal Capacitance Code	
474	47,000 pF = 0.47 µF
105	1,000,000 pF = 1 µF

Option: R — Reel taping (Tape running direction)

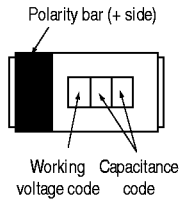
■ Specifications

Operating temperature range	−55 to +125°C	
Rated working voltage	4 to 35 V.DC	
Nominal capacitance range	0.1 to 150 µF	
Capacitance tolerance	±20% (120 Hz/+20°C)	
DC leakage current	I ≤ 0.01 CV or 0.5 (µA) after 2 minutes of rated working voltage at +20°C (Whichever is greater)	
tan δ	≤ 3.3 µF 0.04 max.	(120 Hz / +20°C)
	4.7 to 68 µF 0.06 max.	
	≥ 100 µF 0.08 max.	
Resistance to soldering heat	The capacitor shall withstand dipping into solder for 5±1 seconds at 260±5°C	
Moisture resistance	After 500 hours exposure at +40°C and 90 to 95% R.H. without load, the capacitor shall mee the following limits:	
	Capacitance change	±10% of initial measured value
	tan δ	≤ initial specified value
	DC leakage current	≤ initial specified value
Endurance	After 2,000 hours application of DC rated working voltage at +85°C or derated voltage at +125°C, the capacitor shall meet the following limits:	
	Capacitance change	±10% of initial measured value
	tan δ	≤ initial specified value
	DC leakage current	≤ 125% of initial specified value

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.
Whenever a doubt about safety issues arises from this product, please inform us immediately for technical consultation.

■ Marking

Size Y



Working Voltage Code

(V)	4	6.3	10	16	20	25	25
(Code)	G	J	A	C	D	E	V

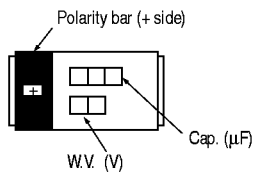
Capacitance Code

(μF)	1	1.5	2.2	3.3	4.7	6.8
(Code)	A	E	J	N	S	W

Multiplier	10^5	10^6	10^7
Second code	5	6	7

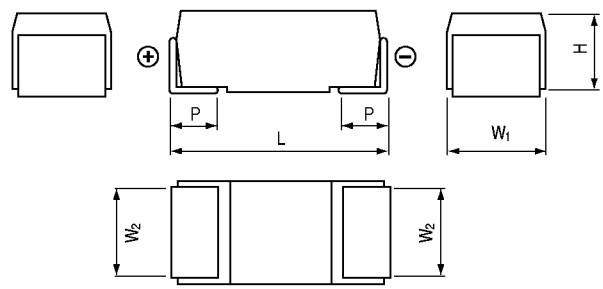
A6: 1.0 x 10^6 pf (1.0 μF)
JF: 2.2x10^5 pf (0.22 μF)

Sizes X, C, V, D



Note: 6.3 W.V. abbreviated to 6 V

■ Dimensions in mm (not to scale)



Size code	L±0.2	W_1±0.2	W_2±0.10	H±0.2	P±0.3
Y	3.2	1.6	1.20	1.6	0.8
X	3.5	2.8	2.20	1.9	0 8
C	6.0	3.2	2.20	2.5	1.3
V	5.6	4.6	2.40	3.2	1.3
D	7.3	4.3	3.65	2.8	1.3

Note: Each case size has different configuration of terminal.

■ Case Size

Cap. (μF)		Working Voltage 4 (0G) Standard	4 (0G) Miniature	6.3 (OJ) Standard	6.3 (OJ) Miniature	10 (1A) Standard	10 (1A) Miniature	16 (1C) Standard	16 (1C) Miniature	20 (1D) Standard	20 (1D) Miniature	25 (1E) Standard	25 (1E) Miniature	35 (1V) Standard	35 (1V) Miniature
0.1	(104)													Y	
0.15	(154)													Y	
0.22	(224)													Y	
0.33	(334)													Y	
0.47	(474)											Y		Y	
0.68	(684)							Y		Y				Y	
1.0	(105)							Y				Y		X	Y
1.5	(155)							Y		Y		X	Y	X	
2.2	(225)					Y		Y		X	Y	X		X	
3.3	(335)			Y		Y		Y		X	Y	X		C	X
4.7	(475)	Y		Y		Y		Y		X		C	X	C	
6.8	(685)	Y		Y		Y		X		C	X	C		D, V	C
10	(106)	Y		Y		X	Y	X		C	X	D, V	C	D	V
15	(156)	Y		X	Y	X		C	X	D, V	C	D	V		D
22	(226)	X	Y	X		C	X	D, V	C	D, V			D		
33	(336)	X		C	X	D, V	C	D, V	C	D	V				
47	(476)	C	X	D, V	C	D, V	C	D	V						
68	(686)	D, V	C	D, V	C	D	V		D						
100	(107)	D, V	C	D	V		D								
150	(157)	D	V												

( ) shows W.V. and capacitance code.