

Surface Mount Type

Series: TES

Japan



- Features Low profile
Height: H=1.2mm max.

■ Specifications

Category temp. range	-55 to +125°C
Rated W.V. Range	4 to 16 V .DC
Nominal Cap. Range	0.47 to 15 μ F
Capacitance Tolerance	± 20 % (120Hz/+20°C)
DC Leakage Current	$I < 0.01CV$ or $0.5 (\mu A)$ after 2 minutes application of rated working voltage at +20°C (Whichever, greater)
Dissipation Factor	Please see the attached standard products list
Resistance to Soldering Heat	The capacitor shall withstand dipping into solder for 5 ± 1 seconds at $+260 \pm 5^\circ C$
Moisture Resistance	After 500 hours exposure at +40 °C and 90 to 95 % R.H. without load, the capacitor shall meet the following limits.
	Capacitance change $\pm 10\%$ of initial measured value
	D.F. $<$ initial specified value, miniaturized size : $< 150\%$ of initial specified value.
	DC leakage current $<$ initial specified value
Endurance	After 2000 hours application of rated DC working voltage at +85°C or derated voltage at +125°C, the capacitor shall meet the following limits.
	Capacitance change $\pm 10\%$ of initial measured value
	D.F. $<$ initial specified value
	DC leakage current < 125 % of initial specified value

■ Marking

● Size Z

Polarity bar (+ side)

W.V. code

W.V. (V)	4	6.3	10	16
code	G	J	A	C

Capacitance code

Capacitance(μ F)	0.47	0.68	1	1.5	2.2	3.3	4.7	6.8	10	15	22
1st code	<u>S</u>	<u>W</u>	A	E	J	N	S	W	<u>A</u>	<u>E</u>	<u>J</u>

(Ex.) JE : 6.3V 1.5 μ F

■ Dimensions in mm (not to scale)

EIA code	Size code	L ± 0.2	W1 ± 0.2	W2 ± 0.1	H max.	P
2012	Z	2.0	1.25	0.9	1.2	0.5 ± 0.2

■ Case size

W.V.(V.DC) Cap(μ F)	4(0G)		6.3(0J)		10(1A)		16(1C)	
	Standard	Miniature	Standard	Miniature	Standard	Miniature	Standard	Miniature
0.47 (474)							Z	
0.68 (684)							Z	
1.0 (105)					Z			Z
1.5 (155)						Z		
2.2 (225)	Z		Z			Z		
3.3 (335)	Z					Z		
4.7 (475)				Z		Z		
6.8 (685)		Z		Z				
10 (106)		Z		Z				
15 (156)		Z						

Note : 1. () shows W.V. and capacitance code.

2. When selecting W.V. see the page 210.

3. We would like to recommend current sizes in above table for new design, but conventional case size is available on request.

4. Other rating upon request (voltage, capacitance, tolerance)

■ Standard Products

W.V.	Cap. (±20%) (μF)	Case Size		Specification		Part No.	Min.PackagingQ'ty
		L x W x H (mm)	Size Code	D.F. (120Hz) (+20°C)	L.C (μA)		Taping (pcs)
4	2.2	2.0x1.25x1.2	Z	0.10	0.5	ECST0GZ225R	3000
	3.3	2.0x1.25x1.2	Z	0.15	0.5	ECST0GZ335R	3000
	6.8	2.0x1.25x1.2	Z	0.20	0.5	ECST0GZ685R	3000
	10	2.0x1.25x1.2	Z	0.20	0.5	ECST0GZ106R	3000
	15	2.0x1.25x1.2	Z	0.20	0.6	ECST0GZ156R	3000
6.3	1.5	2.0x1.25x1.2	Z	0.10	0.5	ECST0JZ155R	3000
	2.2	2.0x1.25x1.2	Z	0.12	0.5	ECST0JZ225R	3000
	4.7	2.0x1.25x1.2	Z	0.20	0.5	ECST0JZ475R	3000
	6.8	2.0x1.25x1.2	Z	0.20	0.5	ECST0JZ685R	3000
	10	2.0x1.25x1.2	Z	0.20	0.7	ECST0JZ106R	3000
10	1	2.0x1.25x1.2	Z	0.10	0.5	ECST1AZ105R	3000
	1.5	2.0x1.25x1.2	Z	0.12	0.5	ECST1AZ155R	3000
	2.2	2.0x1.25x1.2	Z	0.20	0.5	ECST1AZ225R	3000
	3.3	2.0x1.25x1.2	Z	0.20	0.5	ECST1AZ335R	3000
	4.7	2.0x1.25x1.2	Z	0.20	0.5	ECST1AZ475R	3000
16	0.47	2.0x1.25x1.2	Z	0.10	0.5	ECST1CZ474R	3000
	0.68	2.0x1.25x1.2	Z	0.10	0.5	ECST1CZ684R	3000
	1	2.0x1.25x1.2	Z	0.20	0.5	ECST1CZ105R	3000