

Surface Mount Type

Series: TEH

■ Features High moisture resistance at +60°C, 90 to 95 % R.H

■ Specifications

Category temp. range	-55 to +125°C					
Rated W.V. Range	4 to 35 V.DC					
Nominal Cap. Range	0.15 to 100 μF					
Capacitance Tolerance	±20 % (120Hz/+20°C)					
DC Leakage Current	$I \leq 0.01 \text{ CV or } 0.5(\mu\text{A})$ after 2 minutes application of rated working voltage at 20°C (whichever, greater)					
Dissipation Factor	Please see the attached standard products list					
Impedance	Cap.(μF)	0.1 to 0.22	0.33 to 0.68	1.0 to 6.8	10 to 33	47 to 100
	Z(Ω) max.	60	15	8	3	1
Resistance to Soldering Heat	The capacitor shall withstand dipping into solder for 10 ± 1 seconds at $+260 \pm 5^\circ\text{C}$					
Moisture Resistance	After 1000 hours exposure at $+60^\circ\text{C}$ 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.	\leq initial specified value				
	DC leakage current	$\leq 200\%$ of initial specified value				
Endurance	After 2000 hours application of rated DC working voltage at $+85^\circ\text{C}$ or derated voltage at $+125^\circ\text{C}$, the capacitor shall meet the following limits.					
	Capacitance change	$\pm 10\%$ of initial measured value				
	D.F.	\leq initial specified value				
	DC leakage current	$\leq 125\%$ of initial specified value				
Temperature Cycle	After 100 cycles at $-55^\circ\text{C} / +125^\circ\text{C}$, the capacitor shall meet the following limits.					
	Capacitance change	$\pm 5\%$ of initial measured value				
	D.F.	\leq initial specified value				
	DC leakage current	$\leq 125\%$ of initial specified value				

■ Marking

● Size Y	Manufacture's identification	W.V. code	Capacitance code
Polarity bar (+side)		W.V. (V) code	Cap. code
		G J A C D E V	474 470000 pF= 0.47 μF
			475 4700000 pF= 4.7 μF
● Size X,C,D	Cap. Code(same as size Y)	Manufacture's identification	
		Polarity Bar(+side)	W.V.(V)
		* (for 6.3W.V. abbreviated to 6 V)	

■ Dimensions in mm (not to scale)

EIA code	Size code	L ± 0.2	W1 ± 0.2	W2 ± 0.1	H ± 0.2	P ± 0.3
3216	Y	3.2	1.6	1.2	1.6	0.8
3528	X	3.5	2.8	2.2	1.9	0.8
6032	C	6.0	3.2	2.2	2.5	1.3
7343	D	7.3	4.3	2.4	2.8	1.3

* Each case side has different configuration of terminal.

■ Case size

W.V(V.DC) Cap.(μF)	4(0G)		6.3(0J)		10(1A)		16(1C)		20(1D)		25(1E)		35(1V)	
	Standard	Miniature												
0.15 to 0.33														Y
0.47 (474)														X Y
0.68 (684)														X Y
1.0 (105)														Y X
1.5 (155)														C X
2.2 (225)					Y		X				Y	X		C X
3.3 (335)		Y				Y	X				X	C X		D C
4.7 (475)	Y			Y	X	Y	X				C X			D
6.8 (685)		Y	X	Y		X	C	X	C					D
10 (106)	X	Y		X	C	X	C			C	D			D
15 (156)		X	C	X	C				C	D				D
22 (226)	X	C				C	D			D				
33 (336)	C			C	D		D							
47 (476)		C	D		D									
68 (686)	D		D											
100 (107)	D													

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, size)

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