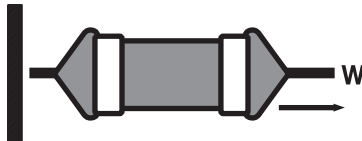


HIGH VOLTAGE CERAMIC CHIP CAPACITOR-SMD

TS18H

◆ Reliability and Test Conditions

ITEMS	REQUIREMENTS	TEST CONDITIONS
Operating temperature	Y5V:-30°C~+85°C X7R:55°C~+12°C NOP:-55°C~+125°C	
Storage temperature and humidity range	40°C max, 70%RH max	
Withstanding voltage	No dielectric broken nor mechanical breakdown	2.5 times rated voltage for under 250V capacitors 2.0 times rated voltage for 250 to 500V capacitors 1.5 times rated voltage for 500 to 1000V capacitors 1.2 times rated voltage for 1000 to 3000 V capacitors
Insulation resistance	500MΩμF or 10GΩ, whichever is less @ 25°C, WVDC	1. Rated voltage shall be applied. (When rated voltage <1000VDC, if rated voltage >=1000VDC, apply 1000VDC max.) 2. Measurement is taken after one minute.
Capacitance temperature coefficient	Y5V:-82% to + 22% X7R:±15% NPO:0±30(ppm°C)	
Capacitance	Within specified tolerance	NPO: 1000pF max: 1MHz±20%, 0.5Vrms max 1000pF min: 1KHz±10%, 1±0.2Vrms max X7R: 1KHz±10%, 1±0.2Vrms max Y5V: 1KHz±10%, 0.5±0.2 Vrms max
Dissipation factor(DF)	Y5V:5%max. X7R:2.5%max. NPO:0.1%max.	
Solderability	More than 90% of the terminal electrode shall be covered with new solder.	1. Preheat Temperature:150°C 60secs 2. Solder: H63A(eutectic solder) 3. Solder Temperature:230±5°C 4. Flux: rosin 5. Dipping Time:4±0.5sec
Solder heat resistance	1. No damage such as cracks should be caused in chip element 2. More than 75% of the terminal electrode shall be covered with solder 3. Capacitance range: Y5V:±20% X7R:±7.5% NPO:±2.5% 4. DF : Y5V: 5% max. X7R:3%max. NPO:0.1%max	1. Preheat Temperature:150°C, 60secs 2. Solder: H63A(eutectic solder) 3. Solder Temperature:260±5°C 4. Flux: rosin 5. Dipping Time:5±0.5sec 6. Cooling: Nature heat dissipation Y5V:48±4hours X7R:48±4hours NPO:24±2hours
Tendile strength (Terminal strength)	No mechanical damage 	Size W(Kgf) Time(sec) 0603 series ≧ 0.5 0805 series ≧ 0.6 1206 series ≧ 1.0 1210 series ≧ 1.0 >25 1808 series ≧ 1.0 1812 series ≧ 1.5 2220 series ≧ 2.0

HIGH VOLTAGE CERAMIC CHIP CAPACITOR-SMD

TS18H

◆ Selection Guide

0603	0805	1206	1210	1808	1812	2220	SIZE
250	1000 500 250	2000 1000 500 250	2000 1000 500 250	3000 2000 1000 500 250	3000 2000 1000 500 250	3000 2000 1000 500 250	VOLTS DC
085	085 085 085	2R2 2R2 2R2		100 100 100 100 100	100 100 100 100 100	100 100 100 100 100	0.5pF 1pF
							1.2pF 1.8pF
							2.2pF 2.7pF
							3.3pF 3.9pF
							4.7pF 5.6pF
							6.8pF 8.2pF
							10pF 12pF
							15pF 18pF
							22pF 27pF
							33pF 39pF
							47pF 56pF
							68pF 82pF
							100pF 120pF
							150pF 180pF
							220pF 270pF
							330pF 390pF
							470pF 560pF
							680pF 820pF
							1000pF 1200pF
							1500pF 1800pF
							2200pF 2700pF
							3300pF 3900pF
							4700pF 5600pF
							6800pF 8200pF
							0.01μF 0.012μF
							0.015μF 0.018μF
							0.022μF 0.027μF
							0.033μF 0.039μF
							0.047μF 0.056μF
							0.068μF 0.082μF
							0.1μF 0.12μF
							0.15μF 0.18μF
							0.22μF 0.27μF
							0.33μF

0805	1206	1210	1812	2220	SIZE
100	100	100	100 250	100 250	VOLTS DC
					0.033μF
					0.039μF
					0.047μF
					0.056μF
					0.068μF
					0.082μF
					0.10μF
					0.12μF
					0.15μF
					0.18μF
					0.22μF
					0.27μF
					0.33μF
					0.39μF
					0.47μF
					0.56μF
					0.68μF
					0.82μF
					1.0μF
					1.2μF
					1.5μF
					1.8μF
					2.2μF