

Thin Film Chip Resistors

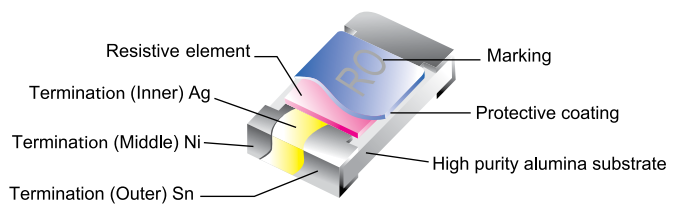
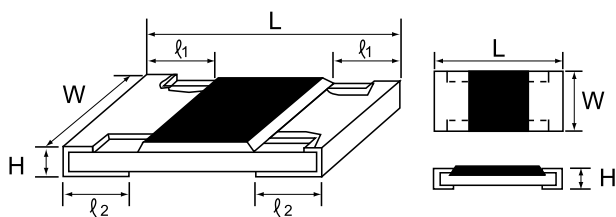
Performance Specification

Short Time Overload	±0.5% Max
Insulation Resistance	Min. 1,000 Mega Ohm
Humidity (Steady State)	±0.3% Max
Load Life	±0.2%; >7KΩ ± 0.5% Max
Terminal Bending	±0.2% Max
Solderability	Min. 95% coverage
Resistance to Soldering Heat	±0.2% Max

Ordering Procedure: Ex.: TC06, 1/8W, 25PPM, +/-0.25%, 10Ω T/R-5000

T	C	0	6	2	5	C	1	0	0	J	T	5	E		
Resistor Size: TC02 = 0402 TC03 = 0603 TC05 = 0805 TC06 = 1206 TC10 = 2010 TC12 = 2512 TC07 = 1210								Resistance value: <ul style="list-style-type: none"> E-24 series: 1st digit is "0" 2nd & 3rd digits are significant figures of the resistance 4th indicates the number of zeros E-96 series: 1st to 3rd digits are significant figures of the resistance 4th digit indicates the number of zeros. "J" ~ 0.1, "K" ~ 0.01, "L" ~ 0.001 Ex. 012J ~ 1Ω, 226K ~ 2Ω26 							
Temperature Coefficient: 05 = 5PPM 25 = 25PPM 10 = 10PPM 50 = 50PPM 15 = 15PPM A0 = 100PPM								Tolerance: T = ±0.01% A = ±0.05% B = ±0.10% C = ±0.25% D = ±0.5% F = ±1%				Packing Type: T = Paper Tape/Reel E = Plastic Tape/Reel			
								Packing Qty: 4 = 4,000 pcs 5 = 5,000 pcs. C = 10,000 pcs.							
								Special Feature: E = Lead (Pb) Free Plating Type/ RoHS compliant							

Dimension



Type	Dimension (mm)				
	L	W	H	l1	l2
TC02 (0402)	1.00±0.10	0.50±0.05	0.32±0.08	0.20±0.10	0.23±0.13
TC03 (0603)	1.60±0.15	0.80±0.15	0.45±0.10	0.30±0.20	0.30±0.20
TC05 (0805)	2.00±0.15	1.25±0.15	0.55±0.10	0.35±0.25	0.40±0.25
TC06 (1206)	3.10±0.20	1.55±0.15	0.55±0.10	0.45±0.25	0.45±0.25
TC07 (1210)	3.10±0.15	2.50±0.25	0.55±0.10	0.50±0.30	0.55±0.25
TC10 (2010)	4.95±0.20	2.45±0.20	0.55±0.10	0.60±0.30	0.50±0.25
TC12 (2512)	6.35±0.20	3.15±0.20	0.55±0.10	0.60±0.30	0.50±0.25

Note:
 1.) Standard Operating Temp (°C): -55 -+155
 2.) Standard : All Tolerance use E-96 Series
 Only 2% & 5% use E-24 Series

Thin Film Chip Resistors

Features

- Thin Film NiCr resistance element
- Precision tolerance from $\pm 0.01\%$, $\pm 0.05\%$, $\pm 0.10\%$, $\pm 0.25\%$, $\pm 0.50\%$, $\pm 1\%$
- Extremely low TCR from $\pm 5 \sim \pm 50$ PPM/ $^{\circ}\text{C}$
- Special packaging 1,000 pcs. / 2,000 pcs. per reel available



Application

- Medical equipment
- Testing / Measuring equipment
- Communication device, cellphone. GPS, PDA
- Automatic equipment controller
- Printer equipment
- Converters

Standard

Type	Power Rating at 70°C	Max Working Voltage	Max Overload Voltage	T.C.R. PPM/ $^{\circ}\text{C}$	Tolerance %	Resistance Range (Special low)	Resistance Range	Resistance Range (Special high)
TC02 (0402)	1/16W	25V	50V	± 25 ± 50	$\pm 0.10\%$ $\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$		10 Ω ~ 332K Ω	
TC03 (0603)	1/16W	50V	100V	± 25 ± 50	$\pm 0.05\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 332K Ω	
					$\pm 0.10\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	
					$\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	2 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	
TC05 (0805)	1/10W	100V	200V	± 25 ± 50	$\pm 0.05\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 511K Ω	
					$\pm 0.10\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 2M Ω
					$\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	1 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 2M Ω
TC06 (1206)	1/8W	150V	300V	± 25 ± 50	$\pm 0.05\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	
					$\pm 0.10\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 2.5M Ω
					$\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	1 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 2.5M Ω
TC07 (1210)	1/4W	150V	300V	± 25 ± 50	$\pm 0.05\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	
					$\pm 0.10\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 2.5M Ω
					$\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	1 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 2.5M Ω
TC10 (2010)	1/4W	150V	300V	± 25 ± 50	$\pm 0.05\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	
					$\pm 0.10\%$	4.7 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.1M Ω ~ 3M Ω
TC12 (2512)	1/2W			± 25 ± 50	$\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	1 Ω ~ 9.76 Ω	10 Ω ~ 1M Ω	1.10 Ω ~ 3M Ω