

High Power 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.: TP06, 1/4W, 25PPM, +/-0.25%, 10Ω T/R-5000

T P 0 6 2 5 C 1 0 0 J T 5 E

Resistor Size:

TP03 = 0603 TP05 = 0805
TP06 = 1206 TP07 = 1210

Temperature Coefficient:

05 = 5PPM 25 = 25PPM
10 = 10PPM 50 = 50PPM
15 = 15PPM A0 = 100PPM

Resistance value:

- 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

Packing Type:

T = Paper Tape/Reel
E = Plastic Tape/Reel

Packing Qty:

4 = 4,000 pcs 5 = 5,000 pcs. C = 10,000 pcs.

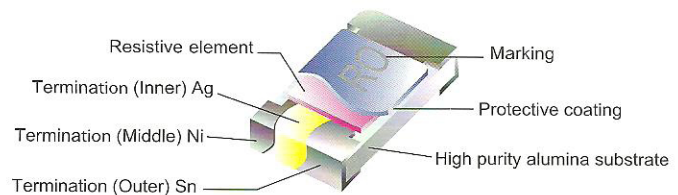
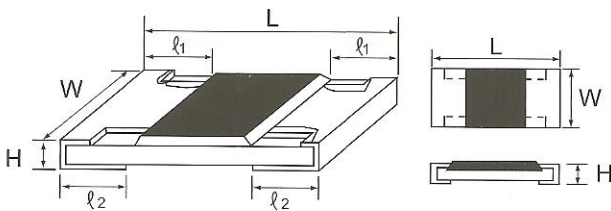
Tolerance:

B = ±0.10%
C = ±0.25%
D = ±0.5%
F = ±1%

Special Feature:

E = Lead (Pb) Free Plating Type/
RoHS compliant

Dimension



Type	Dimension (mm)				
	L	W	H	l1	l2
TP03 (0603)	1.60±0.15	0.80±0.15	0.45±0.10	0.30±0.20	0.30±0.20
TP05 (0805)	2.00±0.15	1.25±0.15	0.55±0.10	0.35±0.25	0.40±0.25
TP06 (1206)	3.10±0.20	1.55±0.15	0.55±0.10	0.45±0.25	0.45±0.25
TP07 (1210)	3.10±0.15	2.50±0.25	0.55±0.10	0.50±0.30	0.55±0.25

Note:

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

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Features

- Thin Film NiCr resistance element
- Precision tolerance from $\pm 0.10\%$, $\pm 0.25\%$, $\pm 0.50\%$, $\pm 1\%$
- Extremely low TCR from ± 25 PPM/ $^{\circ}\text{C}$, ± 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
TP03 (0603)	1/6W-S 1/10W	75V	150V	± 25 ± 50	$\pm 0.10\%$ $\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	10 Ω ~ 1M Ω
TP05 (0805)	1/4W-S 1/8W	150V	300V	± 25 ± 50	$\pm 0.10\%$ $\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	4.7 Ω ~ 1M Ω
TP06 (1206)	1/3W-S 1/4W	200V	400V	± 25 ± 50	$\pm 0.10\%$ $\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	4.7 Ω ~ 1M Ω
TP07 (1210)	1/3W	200V	400V	± 25 ± 50	$\pm 0.10\%$ $\pm 0.25\%$ $\pm 0.50\%$ $\pm 1.00\%$	4.7 Ω ~ 10M Ω