THICK FILM PRECISION CHIP RESISTORS

The content of this specification may change without notification 10/04/07

HOW TO ORDER

CTR 10- 1001 D Y M

Packaging
M = 7" Reel B = Bulk

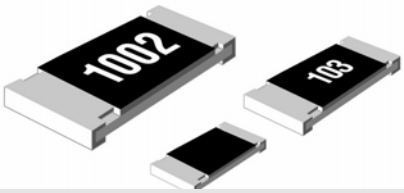
TCR (ppm/°C)
Y = ±50 Z = ±100

Tolerance (%)
B = ±0.1 D = ±0.5 F = ±1

EIA Resistance Value
Standard Decade Values

Size
05 = 0402 10 = 0805 14 = 1210
16 = 0603 18 = 1206 12 = 2010
01 = 2512

Series
CTR = Thick Film Precision

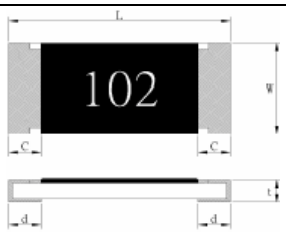


FEATURES

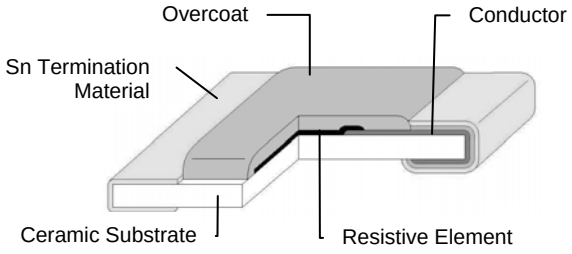
- Excellent stability over a wide range of environmental conditions
- Operating temperature -55°C ~ +125°C
- Compact, thin, and light weight
- High reliability with 3 layer electrode construction.
- Appl. Specifications: EIA 575, IEC 60115-1, JIS 5201-1, and MIL-R-55342G
- Either ISO 9001 or ISO/TS 16949:2002 Certified

DIMENSIONS (mm)

Size	L	W	c	d	t
0402	1.00 ± 0.05	0.5+0.1-0.05	0.20 ± 0.10	0.25+0.05-0.10	0.35 ± 0.05
0603	1.60 ± 0.10	0.80 ± 0.10	0.20 ± 0.10	0.30+0.20-0.10	0.50 ± 0.10
0805	2.00 ± 0.15	1.25 ± 0.15	0.40 ± 0.25	0.30+0.20-0.10	0.50 ± 0.15
1206	3.20 ± 0.15	1.60 ± 0.15	0.45 ± 0.25	0.40+0.20-0.10	0.60 ± 0.15
1210	3.20 ± 0.20	2.60 ± 0.20	0.50 ± 0.30	0.40+0.20-0.10	0.60 ± 0.10
2010	5.00 ± 0.20	2.50 ± 0.20	0.50 ± 0.30	0.40+0.20-0.10	0.60 ± 0.10
2512	6.30 ± 0.20	3.10 ± 0.20	0.50 ± 0.30	0.40+0.20-0.10	0.60 ± 0.15



CONSTRUCTION



DERATING CURVE

For resistors operated at ambient temperature over 70°, power rating shall be derated in accordance with figure 1.

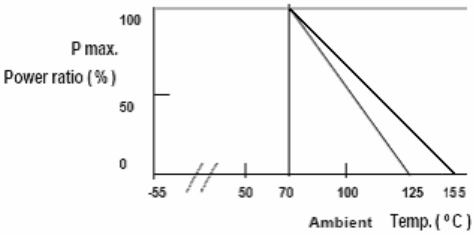


Figure 1. The rated voltage is calculated by the following formula:
$E = \sqrt{P * R}$
E=Rated Voltage(V)
P=Rated Power(W)
R=Resistance Value(Ω)

ELECTRICAL SPECIFICATIONS for CHIP RESISTORS

Size	Power Rating at 70° (W)	Resistance Range	±% Tolerance	TCR (ppm/°C)	Working Voltage	Overload Voltage	Operating Temp. Range
0402	1/16 W	10.0 ~ 97.6	0.5, 1.0	±100	50V	100V	-55°C ~ +125°C
		100 ~ 976	0.5, 1.0	±50			
		100K ~ 1.0M	0.5, 1.0	±50, ±100			
0603	1/10 W	56.0 ~ 560K	0.1	±100	50V	100V	-55°C ~ +155°C
		10.0 ~ 1.0M	0.5	±100			
		100 ~ 1.0M	0.5, 1.0	±50			
0805	1/8 W	56.0 ~ 560K	0.1	±100	150V	200V	-55°C ~ +155°C
		10.0 ~ 1.0M	0.5	±100			
		100 ~ 1.0M	0.5, 1.0	±50			
1206	1/4 W	56.0 ~ 560K	0.1	±100	200V	400V	-55°C ~ +155°C
		10.0 ~ 1.0M	0.5	±100			
		100 ~ 1.0M	0.5, 1.0	±50			
1210	1/3 W	56.0 ~ 560K	0.1	±100	200V	400V	-55°C ~ +155°C
		10.0 ~ 1.0M	0.5	±100			
2010	1/2 W	56.0 ~ 560K	0.1	±100	200V	400V	-55°C ~ +155°C
		10.0 ~ 1.0M	0.5	±100			
2512	1.0 W	56.0 ~ 560K	0.1	±100	200V	400V	-55°C ~ +155°C
		10.0 ~ 1.0M	0.5	±100			

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