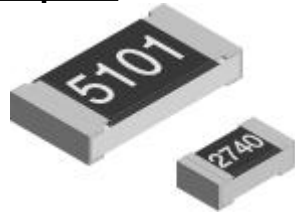


Precision Resistor Chips

CR Series

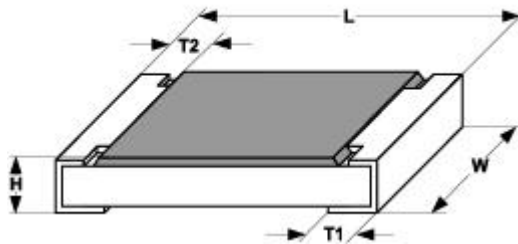
Description



With TCR's to 5 ppm, these precision resistor chips are perfect in many applications including Op Amp gain control, test and measurement, voltage regulation, and temperature sensing. Automotive applications such as torque sensors, engine controls, and power steering make the performance of these products a must when high reliability parts are required.

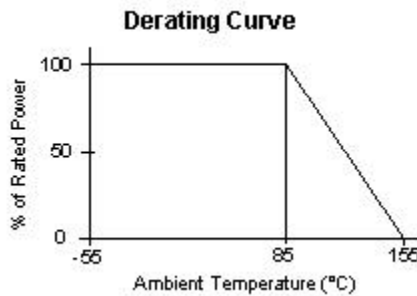
This product is RoHS compliant / Lead Free

Mechanical



Model	L	W	H	T1	T2
CR0402	1.00 ± 0.05	0.50 ± 0.05	0.35 ± 0.05	0.25 ± 0.10	0.20 ± 0.10
CR0603	1.60 ± 0.20	0.80 ± 0.20	0.40 ± 0.10	0.30 ± 0.20	0.30 ± 0.20
CR0805	2.00 ± 0.20	1.25 ± 0.20	0.40 ± 0.10	0.40 ± 0.20	0.40 ± 0.20
CR1206	3.20 ± 0.20	1.60 ± 0.20	0.40 ± 0.10	0.45 ± 0.20	0.40 ± 0.20

Electrical



Model	Size		Resistance Ranges (Ω)	Resistance Tolerances Available (%)				TCR Available (ppm/°C)			
	Inch	Metric									
CR0402	0402	1005	10 - 46.4								±100
			47 - 97.6		±0.05	±0.10	±0.25	±0.50		±10	±25
			100 - 2.94K	±0.02	±0.05	±0.10	±0.25	±0.50	±5	±10	±25
			3K - 100K		±0.05	±0.10	±0.25	±0.50		±10	±25
CR0603	0603	1608	10 - 46.4								±50
			47 - 97.6		±0.05	±0.10	±0.25	±0.50		±10	±25
			100 - 4.99K	±0.02	±0.05	±0.10	±0.25	±0.50	±5	±10	±25
			5.1K - 270K		±0.05	±0.10	±0.25	±0.50		±10	±25
			274K - 332K			±0.10		±0.50			±25
340K - 360K					±0.50			±25			
CR0805	0805	2012	10 - 46.4								±50
			47 - 97.6		±0.05	±0.10	±0.25	±0.50		±10	±25

			100 - 10K	±0.02	±0.05	±0.10	±0.25	±0.50	±5	±10	±25
			10.2K - 475K		±0.05	±0.10	±0.25	±0.50		±10	±25
			487K - 1M			±0.10		±0.50			±25
CR1206	1206	3216	47 - 97.6		±0.05	±0.10	±0.25	±0.50		±10	±25
			100 - 33.2K	±0.02	±0.05	±0.10	±0.25	±0.50	±5	±10	±25
			34K - 1M		±0.05	±0.10	±0.25	±0.50		±10	±25

Model	Power Rating (to 85° C)		Maximum Operating Voltage	Operating Temp. Range	E Series	Packaging
	General	Ultra-Reliable				
CR0402	1/16 W	1/32 W	25 V	-55°C to 155°C	24 - 96	1,000 pcs/reel (T1 : P, W) 5,000 pcs/reel (T5 : B) 10,000 pcs/reel (T10 : B, C, D)
CR0603	1/10 W	1/16 W	75 V	-55°C to 155°C	24 - 96	1,000 pcs/reel (T1 : P, W, B) 5,000 pcs/reel (T5 : B, C, D)
CR0805	1/8 W	1/10 W	100 V	-55°C to 155°C	24 - 96	1,000 pcs/reel (T1 : P, W, B) 5,000 pcs/reel (T5 : B, C, D)
CR1206	1/4 W	1/8 W	150V	-55°C to 155°C	24 - 96	1,000 pcs/reel (T1 : P, W, B) 5,000 pcs/reel (T5 : B, C, D)

Notes:

- Please contact TFT for resistance tolerances of ±0.01%
- Please contact TFT for CR1210 series (3225 metric) with 1/2 W power rating
- Refer to derating curve for operating temperatures above 85°C

Part Number

CR****

*

Product Designator / Size (0402, 0603, 0805, 1206)

TCR PPM/°C (M = ±5, Y = ±10, E = ±25, Q = ±50, R = ±100)

Resistance Value (see note below)

- * ----- Tolerance % (Q = ± 0.02 , A = ± 0.05 , B = ± 0.10 , C = ± 0.25 , D = ± 0.50)
- ** ---- Packaging (T1 = 1,000, T5 = 5,000, T10 = 10,000)

Note:

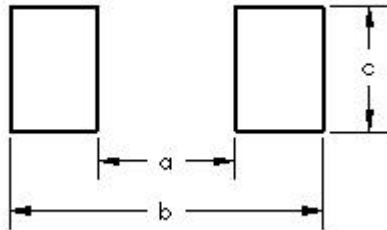
Resistance value is 4 digit number with first 3 digits being significant. The last digit specifies the number of zeros. Use the letter 'R' to denote decimal position as necessary.

Examples:

1000 = 100 Ω

2211 = 2.21 K Ω

Land Pattern



Solder Pad Dimensions (mm)				
Size		a	b	c
Inch	Metric			
0402	1005	0.50	1.60	0.60
0603	1608	1.00	3.00	1.20
0805	2012	1.20	4.00	1.65
1206	3216	2.20	5.00	2.00



1980 Commerce Drive, North Mankato, MN. 56001 (507) 625-8445