CHR Series

Non-magnetic Chip Resistors



- **Resistances from 1 Ohm to 10M Ohms**
- **Power Rating 0.05 to 2Watt**
- **Resistance Tolerances to ± 0.5%**
- **TCR's to ± 50 ppm/°C**
- **Non-Magnetic (contact PtAg)**
- **Suitable for Gluing or Soldering**
- **Sizes: 0402 / 0603 / 0805 / 1206 / 2010 / 2512 / 4020**
- **Special High Temperature Version to 300°C (H)**
  (See ordering Information below)

SPECIFICATIONS

Type		0402 [4]	0603 [4]	0805 [4]	1206	2010	2512	4020
Power Rating (W)		0.05	0.10	0.125	0.25	0.50	1.0 [3]	2.0 [3]
Working [2] Voltage (VAC)	Trimmed	30	75	100	200	250	300	500
	Untrimmed (≥ 5% tol.)	60	150	200	400	900	1200	1200
Resistance Range (Ω)		Tolerances Available (%) Temperature Coefficients Available (± ppm/°C) [1] (others upon request)						
1Ω - <10Ω		10% to 20% 250	5% to 20% 100 / 250	5% to 20% 100 / 250	5% to 20% 100 / 250	5% to 20% 100 / 250	5% to 20% 100 / 250	5% to 20% 100 / 250
10Ω - <100Ω		5% to 10% 100	2% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100
100Ω - 1M		1% to 10% 50 / 100	1% to 10% 50 / 100	0.5% to 10% 50 / 100	0.5% to 10% 50 / 100	0.5% to 10% 50 / 100	0.5% to 10% 50 / 100	0.5% to 10% 50 / 100
>1M - 10M		5% to 20% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100	1% to 10% 50 / 100

1) TCR: in ppm/C; +25°C...+125°C; TCR below standard TCR (highest value): +25°C...+85°C
2) Continuous operating voltage (U_, Ueff): V ≤ □(P*R) or max. working voltage (the lower value)
3) Solder pads must be sufficiently large to keep resistors's peak temperature below rating
4) Best tolerance for HIgh Temp version is 2%

Specification	Value
Temperature Range	-55°C to +155°C (Standard) -55°C to +125°C (50ppm/°C Parts) -55°C to +300°C (High Temperature Version, TCR valid +25°C to +125°C)
Climactic Cetegory	55 / 155 / 56
Solderability	250°C / 3s (up to 6 months after shipment or 12 monts at storage in Nitrogen)
Max. Soldering Temperature	260°C / 10s

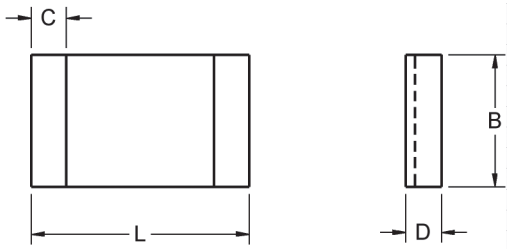
Riedon Inc. 300 Cypress Avenue Alhambra CA 91801 ☎ (626) 284-9901 🖷 (626) 284-1704
www.riedon.com

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SPECIFICATIONS (continued)

Long Term Stability	Max ΔR	
	<10Ω	10Ω - 10M
Storage 125°C / 1000h	±1%	±0.5%
Storage 155°C / 1000h	±2%	±1%
Load Life / P=70% / 70°C / 1000h	±1%	±0.5%
Short term overload	±0.5%	±0.25%
Humidity / 96%RH / 40°C / 56 days	±1%	±0.5%
RoHS Compliant Exemption	This part is RoHS complian with exemption 7(c)-I, as authorized by 2011/b5/EU.	



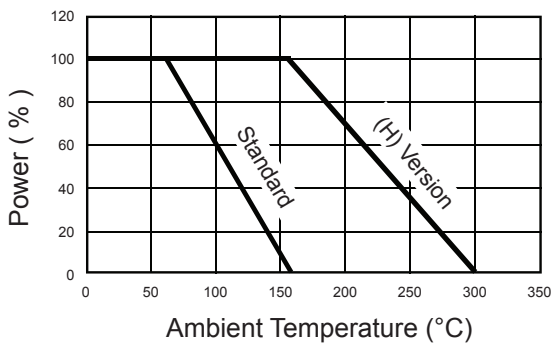
Type	Dimensions			
	L	B	D	C
CHR 0402 / CHR 0402H	0.95 +0.10 / 0.05	0.48 +0.10 / -0.05	0.28 +0.1 / -0.05	0.1 +0.1 / -0.05
CHR 0603 / CHR 0603H	1.5 +0.15 / -0.05	0.8 +0.15 / -0.05	0.4 +0.15 / -0.05	0.2 +0.2 / -0.1
CHR 0805 / CHR 0805H	2.0 +0.15 / -0.05	1.25 +0.15 / -0.05	0.4 +0.15 / -0.05	0.3 +0.2 / -0.1
CHR 1206 / CHR 1206H	3.2 +0.15 / -0.05	1.5 +0.2 / -0.05	0.4 +0.15 / -0.05	0.3 +0.2 / -0.1
CHR 2010 / CHR 2010H	5.1 +0.15 / -0.05	2.5 +0.2 / -0.05	0.6 +0.20 / -0.1	1.2 ±0.2
CHR 2512 / CHR 2512H	6.3 +0.15 / -0.05	3.5 +0.2 / -0.05	0.6 +0.15 / -0.05	0.9 ±0.2
CHR 4020 / CHR 4020H	10.2 +0.15 / -0.05	5.1 +0.2 / -0.05	0.6 +0.15 / -0.05	0.9 ±0.2

Packaging:

Bulk or Blistertape to IEC 60286-3

Tape width 8mm / Reel Diameter 180 or 330mm
Minimum quantity Bulk / 100 pieces per value
Minimum quantity Tape & Reel / 500 pieces per value
(**Note**: Except size 0402 / 1000 pieces per value)

Power Derating Curve



Ordering Information

Standard Part Description: Part Type - Resistance - Tolerance - TCR
Example: CHR 0603 10 kOhms 5% 50ppm
(Note: if no TCR is specified, the highest value will be supplied)

High Temperature Part Description (**H**): Part Type **H** - Resistance - Tolerance - TCR
Example: CHR 0805H 50 kOhms 10% 50ppm
(Note: if no TCR is specified, the highest value will be supplied)

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