

CHS Series

High Resistance, Thick Film Chip Resistors



- Resistances from 10M to 1T Ohms
- Power Rating 0.05 to 0.8 Watts
- Resistance Tolerances to $\pm 0.25\%$
- TCR's to ± 25 ppm/ $^{\circ}\text{C}$
- Non-Magnetic
- High Value Thick Film Resistance Element
- Sizes, 0402, 0603, 0805, 1206, 1210, 2512, 4020

SPECIFICATIONS

Type	0402	0603	0805	1206	1210	2512	4020	
Power Rating (W) ¹	0.050	0.075	0.125	0.25	0.35	0.60	0.80	
Working Voltage (VAC)	Trimmed	30	75	100	200	300	1000	4000
	Un-Trimmed	90	200	300	600	900	2000	6000
Resistance Range (Ω)	Tolerances Available (%) Temperature Coefficients Available (\pm ppm/ $^{\circ}\text{C}$) Voltage Coefficients Available (ppm / V)							
10M - 100M	5% to 20% 100, 250 <500ppm/V	1% to 20% 100, 250 <250ppm/V	0.5% to 20% 50, 100 <100ppm/V	0.5% to 20% 25, 50, 100 <100ppm/V	0.5% to 20% 25, 50, 100 <50ppm/V	0.5% to 20% 25, 50, 100 <10ppm/V	0.25% to 10% 25, 50, 100 <5ppm/V	
>100M - 500M	5% to 20% 250, 500 <1000ppm/V	2% to 20% 100, 250 <500ppm/V	2% to 20% 100, 250 <250ppm/V	2% to 20% 50, 100, 250 <100ppm/V	2% to 20% 50, 100, 250 <100ppm/V	1% to 20% 25, 50, 100 <25ppm/V	0.5% to 20% 25, 50, 100 <10ppm/V	
>500M - 1G	5% to 20% 250, 500 <1000ppm/V	5% to 20% 250, 500 <500ppm/V	5% to 20% 250, 500 <250ppm/V	5% to 20% 100, 250 <250ppm/V	5% to 20% 100, 250 <100ppm/V	1% to 20% 100, 250 <25ppm/V	1% to 20% 25, 50, 100 <10ppm/V	
>1G - 10G	10% to 30% 1000, 2000 <2000ppm/V	5% to 30% 500, 1000 <2000ppm/V	5% to 20% 500, 1000 <1000ppm/V	5% to 20% 500, 1000 <1000ppm/V	5% to 20% 250, 500 <500ppm/V	2% to 20% 250, 500 <100ppm/V	2% to 20% 50, 100 <25ppm/V	
>10G - 100G	-	10% to 30% 1000, 2000 <5000ppm/V	10% to 30% 1000, 2000 <2000ppm/V	10% to 30% 1000, 2000 <2000ppm/V	5% to 20% 500, 1000 <1000ppm/V	5% to 20% 250, 500 <250ppm/V	5% to 30% 100, 250 <100ppm/V	
>100G - 1T	-	10% to 30% 3000 <5000ppm/V	10% to 30% 3000 <5000ppm/V	10% to 30% 3000 <5000ppm/V	5% to 30% 1000, 2000 <2000ppm/V	5% to 20% 500, 1000 <500ppm/V	5% to 30% 250, 500 <250ppm/V	

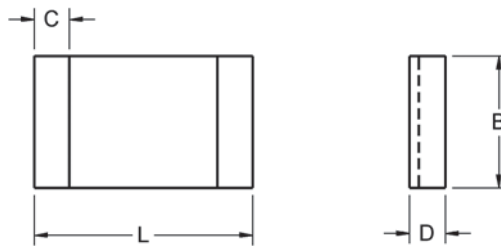
¹ W @ 70 $^{\circ}\text{C}$, 0W @ 155 $^{\circ}\text{C}$

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Specification	Value		
Temperature Range	-55°C to +155°C		
Climactic Category	55 / 155 / 56		
Solderability	250°C, 3s		
Max. Soldering Temperature	260°C, 10s		
Long Term Stability	Max ΔR		
	<1 GΩ	1 GΩ - 10 GΩ	>10 GΩ
Storage 125°C, 1000h	±1%	±2%	±5%
Maximum Voltage, 1000h	±0.5%	±1%	±2%



Type	Dimensions			
	L	B	D	C
CHS 0402	0.040 ±0.002 [1.04 ±0.05]	0.020 ±0.002 [0.5 ±0.05]	0.012 ±0.002 [0.3 ±0.05]	0.004 +0.004 / -0.002 [0.1 +0.1 / -0.05]
CHS 0603	0.060 +0.006 / -0.002 [1.5 +0.15 / -0.05]	0.030 +0.008 / -0.002 [0.8 +0.2 / -0.05]	0.016 +0.006 / -0.002 [0.4 +0.15 / -0.05]	0.008 +0.008 / -0.004 [0.2 +0.2 / -0.1]
CHS 0805	0.080 +0.006 / -0.002 [2.0 +0.15 / -0.05]	0.050 +0.006 / -0.002 [1.25 +0.15 / -0.05]	0.016 +0.006 / -0.002 [0.4 +0.15 / -0.05]	0.012 +0.008 / -0.004 [0.3 +0.2 / -0.1]
CHS 1206	0.126 +0.006 / -0.002 [3.2 +0.15 / -0.05]	0.060 +0.008 / -0.002 [1.5 +0.2 / -0.05]	0.016 +0.006 / -0.002 [0.4 +0.15 / -0.05]	0.012 +0.008 / -0.004 [0.3 +0.2 / -0.1]
CHS 1210	0.126 +0.006 / -0.002 [3.2 +0.15 / -0.05]	0.098 +0.008 / -0.002 [2.5 +0.2 / -0.05]	0.020 +0.006 / -0.002 [0.5 +0.15 / -0.05]	0.032 ±0.008 [0.8 ±0.2]
CHS 2512	0.250 +0.006 / -0.002 [6.3 +0.15 / -0.05]	0.138 +0.008 / -0.002 [3.5 +0.2 / -0.05]	0.024 +0.006 / -0.002 [0.6 +0.15 / -0.05]	0.035 ±0.008 [0.9 ±0.2]
CHS 4020	0.400 +0.006 / -0.002 [10.2 +0.15 / -0.05]	0.200 +0.008 / -0.002 [5.1 +0.2 / -0.05]	0.024 +0.006 / -0.002 [0.6 +0.15 / -0.05]	0.035 ±0.008 [0.9 ±0.2]

Packaging:

Bulk or Blister tape to IEC 60286-3

- Tape width 8mm, Reel Diameter 180 or 330mm
- Minimum quantity Bulk, 100 pieces per value
- Minimum quantity Tape & Reel, 1000 pieces per value

Ordering Information:

Part Number - Resistance - Tolerance - TCR - Packaging

Example: **CHS 0603 100M 5% 100ppm Tape**

(Note: if no TCR is Specified, The highest value will be supplied)

Power Derating Curve

