CHM Series

High Resistance / Thick Film Chip Resistors



- **Resistances from 100k to 10T Ohms**
- **Power Rating 0.05 to 1.5 Watt**
- **Resistance Tolerances to ± 0.25%**
- **TCR's to ±25 ppm/K**
- **Non-Magnetic (contact PtAg)**
- **High Value Thick Film Resistance Element**
- **Sizes: 0402/ 0603 / 0805 / 1206 / 1210 / 2010 / 2512 / 4020**

SPECIFICATIONS

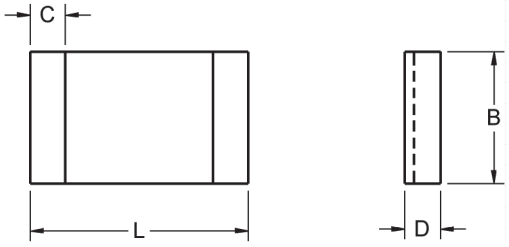
Type		0402	0603	0805	1206	1210	2010	2512	4020
Power Rating (W)		0.05	0.10	0.125	0.25	0.35	0.5	1.0	1.5
Working Voltage (VAC)	Trimmed	30	75	200	600	1000	1500	2000	4000
	Untrimmed	100	220	600	1000	1200	2000	3000	6000
Resistance Range (Ω)		Tolerances Available (%) Temperature Coefficients Available (± ppm/K) Voltage Coefficient (ppm / V)							
100k - 100M		5% to 20% 50 / 100 <500ppm/V	2% to 20% 50 / 100 <100ppm/V	0.5% to 10% 25 / 50 / 100 <50ppm/V	0.5% to 10% 25 / 50 / 100 <50ppm/V	0.5% to 10% 25 / 50 / 100 <25ppm/V		0.5% to 10% 25 / 50 / 100 <10ppm/V	0.25% to 10% 25 / 50 / 100 <5ppm/V
>100M - 1G		5% to 20% 250 / 500 <1000ppm/V	5% to 20% 100 / 250 <500ppm/V	2% to 20% 50 / 100 / 250 <250ppm/V	2% to 20% 50 / 100 / 250 <100ppm/V	1% to 10% 25 / 50 / 100 <50ppm/V		1% to 10% 25 / 50 / 100 <25ppm/V	1% to 10% 25 / 50 / 100 <10ppm/V
>1G - 10G		10% to 30% 1000 / 2000 <2000ppm/V	5% to 30% 500 / 1000 <2000ppm/V	5% to 20% 100 / 250 <500ppm/V	5% to 20% 100 / 250 <250ppm/V	2% to 20% 50 / 100 <100ppm/V		2% to 20% 50 / 100 <100ppm/V	2% to 20% 50 / 100 <25ppm/V
>10G - 100G		-	10% to 30% 1000 / 2000 <10000ppm/V	10% to 30% 500 / 1000 <1000ppm/V	10% to 30% 500 / 1000 <1000ppm/V	5% to 20% 500 / 1000 <500ppm/V		5% to 20% 100 / 250 <250ppm/V	5% to 20% 100 / 250 <100ppm/V
>100G - 1T		-	-	10% to 30% 1000 / 2000 <2000ppm/V	10% to 30% 1000 / 2000 <2000ppm/V	10% to 30% 500 / 1000 <1000ppm/V		5% to 20% 250 / 500 <500ppm/V	5% to 20% 250 / 500 <250ppm/V
>1T - 10T		-	-	-	10% to 30% 2000 <3000ppm/V	10% to 30% 1000 / 2000 <2000ppm/V		10% to 30% 500 / 1000 <1000ppm/V	10% to 30% 250 / 500 <1000ppm/V

[1] W @ 70 °C / 0W @ 155 °C

SPECIFICATIONS (continued)

Specification	Value		
Temperature Range	-55°C to +155°C (extended range up to 250°C upon request)		
Climactic Cetegory	55 / 155 / 56		
Solderability	250°C / 3s (up to 6 month after shipment resp. at storage in Nitrogen)		
Max. Soldering Temperature	260°C / 10s		
Long Term Stability	Max ΔR		
	<1 GΩ	1 GΩ - 10 GΩ	>10 GΩ
Storage 125°C / 1000h	±0.5%	±1%	±2%
Maximum Voltage / 1000h	±0.5%	±1%	±2%

Type	Dimensions			
	L	B	D	C
CHM 0402	0.041 ±0.002 [1.04 ±0.05]	0.020 ±0.002 [0.50 ±0.05]	0.012 ±0.002 [0.3 ±0.05]	0.012 +0.008 / -0.004 [0.1 +0.1 / -0.05]
CHM 0603	0.059 +0.006 / -0.002 [1.5 +0.15 / -0.05]	0.032 +0.006 / -0.002 [0.80 +0.15 / -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]
CHM 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]
CHM 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]
CHM 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]
CHM 2010	0.20 +0.008 / -0.002 [5.1 +0.2 / -0.05]	0.098 +0.008 / -0.002 [2.5 +0.2 / -0.05]	0.024 +0.006 / -0.002 [0.6 +0.15 / -0.05]	0.05 ±0.008 [1.2 ±0.2]
CHM 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]
CHM 4020	0.40 +0.006 / -0.002 [10.20 +0.15 / -0.05]	0.20 +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 Tape & Reel per IEC 286-3 / EIA 481-1-A

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: CHM 2512 10GOhms 10% 50ppm Tape
(Note: if no TCR is specified, the highest value will be supplied)

Power Derating Curve

