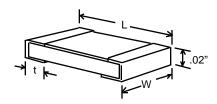
# THICK FILM PRECISION CHIP RESISTORS

## **MILITARY GRADE**

# **MCT SERIES**

#### **FEATURES**

- □ Wraparound or single face termination
- Choice of termination materials: palladium silver, gold, or solder plated nickel
- ☐ 100% Group A screening per MIL-R-55342 available
- ☐ Wide design flexibility for use with hybrid and/or surface mount circuitry
- $\square$  Wide resistance range:  $0.1\Omega$  to  $100M\Omega$
- ☐ Custom sizes, high surge, and untrimmed chips available
- ☐ Backside metallization available





## Precision performance per MIL-R-55342!

RCD series MCT chip resistors are designed to meet the performance requirements of MIL-R-55342! Variety of sizes and termination materials allows wide design flexibility. Palladium silver terminations are recommended for use with conductive epoxy, gold is recommended for wire bonding, and solder plated nickel for soldering. MCT0805 & 1206 wraparound with pretinned solder or palladium silver terminations are the most economical.

### **SPECIFICATIONS**

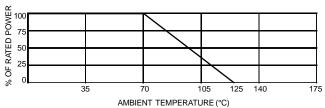
RCD Type	Wattage @ 70°C**	Voltage Rating	Resistance Range	L ±.008 [0.2]	W ±.008 [0.2]	t
MCT0402	50MW	30V	10Ω - 1M	.040 [1.02]	.020 [.51]	.012±.005 [.3±.13]
MCT0505	100MW	50V	1MΩ - 10M	.050 [1.27]	.050 [1.27]	.014±.007 [.35±.18]
MCT0603	100MW	40V	0.1Ω - 100M	.060 [1.53]	.030 [.76]	.012±.006 [.3±.15]
MCT0805	150MW	70V	0.1Ω - 100M	.075 [1.91]	.050 [1.27]	.016±.008 [.4±.2]
MCT1005	200MW	100V	1Ω - 20M	.100 [2.54]	.050 [1.27]	.018±.008 [.45±.2]
MCT1206	250MW	125V	0.1Ω - 100M	.125 [3.18]	.061 [1.55]	.020±.008 [.5±.2]
MCT1505	250MW	125V	1Ω - 10M	.150 [3.81]	.050 [1.27]	.020±010 [.5±.25]
MCT1210	500MW	150V	0.1Ω - 100M	.125 [3.18]	.100 [2.54]	.020±.010 [.5±.25]
MCT2010	800MW	150V	0.1Ω - 100M	.200 [5.08]	.100 [2.54]	.020±.010 [.5±.25]
MCT2512	1000MW	200V	0.1Ω - 100M	.250 [6.35]	.125 [3.18]	.020±.010 [.5±.25]

<sup>\*</sup> Dimension given is for single face termination. Tolerance on wraparound termination is ±.010.

#### **PERFORMANCE CHARACTERISTICS** ( $10\Omega$ to 1M range)

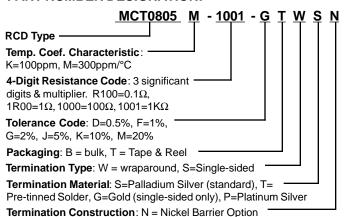
Characteristic	М	К	
Temp. Coefficient Typ.	±300 ppm	±100ppm	
Thermal Shock	0.5%	0.5%	
Short Time Overload	0.5%	0.25%	
High Temp. Exposure	0.5%	0.5%	
Moisture Resistance	0.5%	0.5%	
Load Life	1.0%	0.5%	

## **DERATING**



Single Face Wraparound Termination

### PART NUMBER DESIGNATION:



<sup>\*\*</sup> Wattage based on mounting the chip on a ceramic substrate, derate by 50% if surface mounted to a glass epoxy P.C.B.

<sup>&</sup>lt;sup>t</sup> Military plugs are given for reference only and do not imply qualification or exact interchangeability