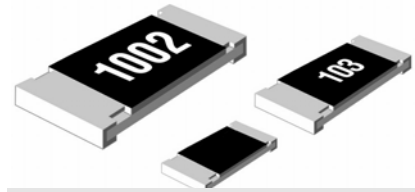
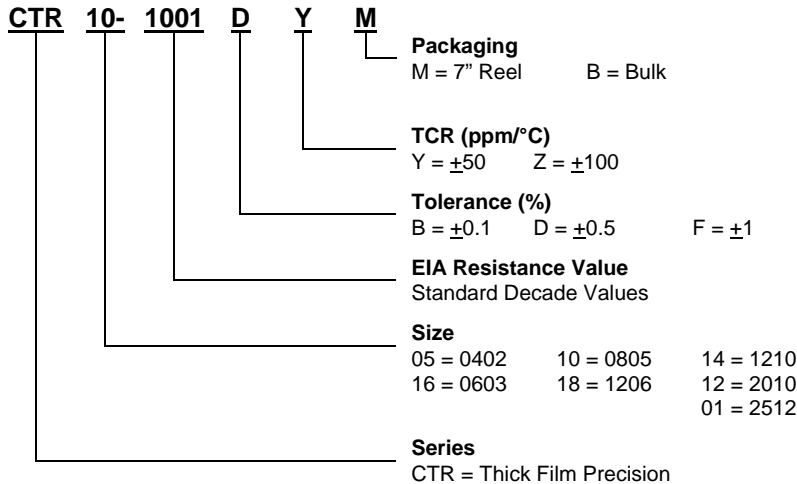


## HOW TO ORDER



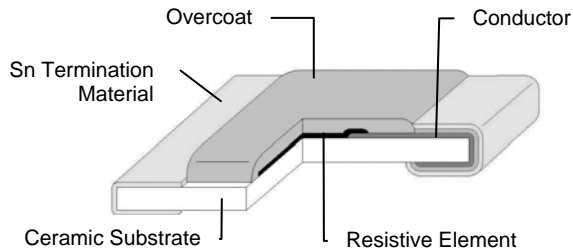
## FEATURES

- Excellent stability over a wide range of environmental conditions
- Operating temperature -55°C ~ +125°C
- Compact, thin, and light weight
- High reliability with 3 layer electrode construction.
- Appl. Specifications: EIA 575, IEC 60115-1, JIS 5201-1, and MIL-R-55342G
- Either ISO 9001 or ISO/TS 16949:2002 Certified

## DIMENSIONS (mm)

| Size | L           | W            | c           | d              | t           |
|------|-------------|--------------|-------------|----------------|-------------|
| 0402 | 1.00 ± 0.05 | 0.5+0.1-0.05 | 0.20 ± 0.10 | 0.25+0.05-0.10 | 0.35 ± 0.05 |
| 0603 | 1.60 ± 0.10 | 0.80 ± 0.10  | 0.20 ± 0.10 | 0.30+0.20-0.10 | 0.50 ± 0.10 |
| 0805 | 2.00 ± 0.15 | 1.25 ± 0.15  | 0.40 ± 0.25 | 0.30+0.20-0.10 | 0.50 ± 0.15 |
| 1206 | 3.20 ± 0.15 | 1.60 ± 0.15  | 0.45 ± 0.25 | 0.40+0.20-0.10 | 0.60 ± 0.15 |
| 1210 | 3.20 ± 0.20 | 2.60 ± 0.20  | 0.50 ± 0.30 | 0.40+0.20-0.10 | 0.60 ± 0.10 |
| 2010 | 5.00 ± 0.20 | 2.50 ± 0.20  | 0.50 ± 0.30 | 0.40+0.20-0.10 | 0.60 ± 0.10 |
| 2512 | 6.30 ± 0.20 | 3.10 ± 0.20  | 0.50 ± 0.30 | 0.40+0.20-0.10 | 0.60 ± 0.15 |

## CONSTRUCTION



## DERATING CURVE

For resistors operated at ambient temperature over 70°, power rating shall be derated in accordance with figure 1.

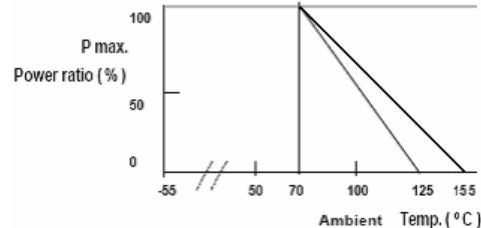


Figure 1. The rated voltage is calculated by the following formula:  
 $E = \sqrt{P \cdot R}$   
 E=Rated Voltage(V)  
 P=Rated Power(W)  
 R=Resistance Value(Ω)

## ELECTRICAL SPECIFICATIONS for CHIP RESISTORS

| Size | Power Rating at 70° (W) | Resistance Range | ±% Tolerance | TCR (ppm/°C) | Working Voltage | Overload Voltage | Operating Temp. Range |
|------|-------------------------|------------------|--------------|--------------|-----------------|------------------|-----------------------|
| 0402 | 1/16 W                  | 10.0 ~ 97.6      | 0.5, 1.0     | ±100         | 50V             | 100V             | -55°C ~ +125°C        |
|      |                         | 100 ~ 976        | 0.5, 1.0     | ±50          |                 |                  |                       |
|      |                         | 100K ~ 1.0M      | 0.5, 1.0     | ±50, ±100    |                 |                  |                       |
| 0603 | 1/10 W                  | 56.0 ~ 560K      | 0.1          | ±100         | 50V             | 100V             | -55°C ~ +155°C        |
|      |                         | 10.0 ~ 1.0M      | 0.5          | ±100         |                 |                  |                       |
|      |                         | 100 ~ 1.0M       | 0.5, 1.0     | ±50          |                 |                  |                       |
| 0805 | 1/8 W                   | 56.0 ~ 560K      | 0.1          | ±100         | 150V            | 200V             | -55°C ~ +155°C        |
|      |                         | 10.0 ~ 1.0M      | 0.5          | ±100         |                 |                  |                       |
|      |                         | 100 ~ 1.0M       | 0.5, 1.0     | ±50          |                 |                  |                       |
| 1206 | 1/4 W                   | 56.0 ~ 560K      | 0.1          | ±100         | 200V            | 400V             | -55°C ~ +155°C        |
|      |                         | 10.0 ~ 1.0M      | 0.5          | ±100         |                 |                  |                       |
|      |                         | 100 ~ 1.0M       | 0.5, 1.0     | ±50          |                 |                  |                       |
| 1210 | 1/3 W                   | 56.0 ~ 560K      | 0.1          | ±100         | 200V            | 400V             | -55°C ~ +155°C        |
|      |                         | 10.0 ~ 1.0M      | 0.5          | ±100         |                 |                  |                       |
|      |                         | 100 ~ 1.0M       | 0.5, 1.0     | ±50          |                 |                  |                       |
| 2010 | 1/2 W                   | 56.0 ~ 560K      | 0.1          | ±100         | 200V            | 400V             | -55°C ~ +155°C        |
|      |                         | 10.0 ~ 1.0M      | 0.5          | ±100         |                 |                  |                       |
|      |                         | 100 ~ 1.0M       | 0.5, 1.0     | ±50          |                 |                  |                       |
| 2512 | 1.0 W                   | 56.0 ~ 560K      | 0.1          | ±100         | 200V            | 400V             | -55°C ~ +155°C        |
|      |                         | 10.0 ~ 1.0M      | 0.5          | ±100         |                 |                  |                       |
|      |                         | 100 ~ 1.0M       | 0.5, 1.0     | ±50          |                 |                  |                       |