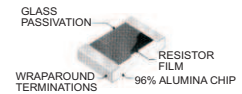


# State of the Art, Inc.

## Thick Film Chip Resistor

### M55342/13 RM0302



## PERFORMANCE

Resistance Range  $1\Omega - 22M\Omega$   
 Tolerances 1%, 2%, 5%, 10%  
 Maximum Power 40 mW  
 Maximum Voltage 15 Volts

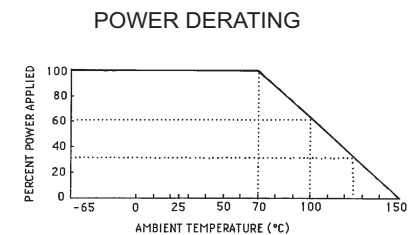
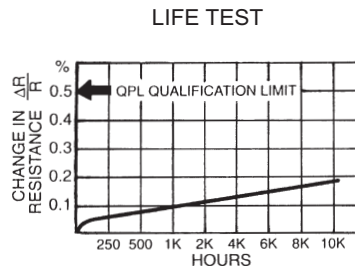
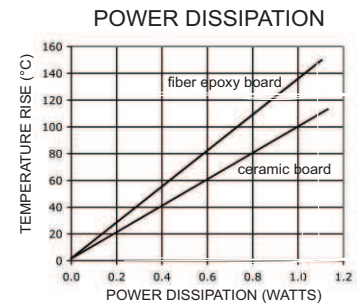
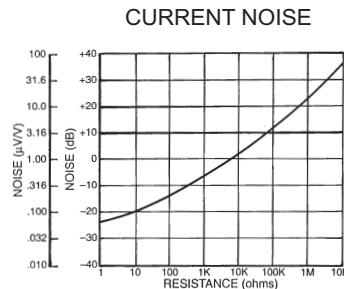
### TESTS

TCR (-55 to +125 °C) in ppm/°C  
 Thermal Shock  
 Low Temperature Operation  
 Short-time Overload  
 Resistance to Soldering Heat  
 Moisture Resistance  
 Life, 2,000 Hours  
 High Temperature Exposure

### CHARACTERISTICS\*

|                                | K      | M      |
|--------------------------------|--------|--------|
| TCR (-55 to +125 °C) in ppm/°C | ±100   | ±300   |
| Thermal Shock                  | ±0.5%  | ±0.5%  |
| Low Temperature Operation      | ±0.25% | ±0.5%  |
| Short-time Overload            | ±0.25% | ±0.5%  |
| Resistance to Soldering Heat   | ±0.25% | ±0.25% |
| Moisture Resistance            | ±0.5%  | ±0.5%  |
| Life, 2,000 Hours              | ±0.5%  | ±2.0%  |
| High Temperature Exposure      | ±0.5%  | ±1.0%  |

\*Maximum allowable change per MIL-PRF-55342, typical change is 10% of these values.



## PART NUMBERING

**M55342 K 13 B 100D S - TR**

PACKAGING CODE: TR = Tape & Reel W= Waffle Pack

PRODUCT LEVEL DESIGNATOR: M: 1% per 1000 hrs. R: 0.01% P: 0.1% S: 0.001% T: Space Level C: Non - ER

RESISTANCE AND TOLERANCE CODE:

Three significant digits, with a letter indicating the decimal location, the tolerance, and the value range.

D: 1%  $\Omega$  G: 2%  $\Omega$  J: 5%  $\Omega$  M: 10%  $\Omega$   
 E: 1% K  $\Omega$  H: 2% K  $\Omega$  K: 5% K  $\Omega$  N: 10% K  $\Omega$   
 F: 1% M  $\Omega$  T: 2% M  $\Omega$  L: 5% M  $\Omega$  P: 10% M  $\Omega$

TERMINATION MATERIALS:

B: Solderable wraparound C: Epoxy bondable palladium/silver wraparound U: Epoxy bondable platinum/gold wraparound  
 W: Gold wire bondable G: Gold wraparound

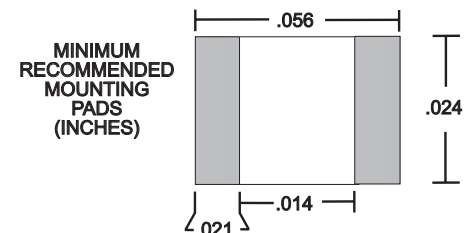
SIZE CODE: /13 = RM0302

TEMPERATURE CHARACTERISTIC: K:  $\pm 100$ ppm M:  $\pm 300$ ppm

PERFORMANCE SPECIFICATION MIL-PRF-55342

## MECHANICAL

|                | INCHES             | MILLIMETERS        |
|----------------|--------------------|--------------------|
| Length         | .032 (.028 - .036) | 0.81 (0.71 - 0.91) |
| Width          | .022 (.017 - .027) | 0.56 (0.43 - 0.69) |
| Thickness      | .015 (.010 - .025) | 0.38 (0.25 - 0.51) |
| Top Term       | .005 (.002 - .012) | 0.13 (0.05 - 0.31) |
| Bottom Term    | .008 (.003 - .013) | 0.20 (0.08 - 0.33) |
| Gap            | .016 (.012 - .020) | 0.41 (0.31 - 0.51) |
| Approx. Weight | .00069 grams       |                    |



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04/09/08

\*Specifications subject to change without notice.\*

www.resistor.com