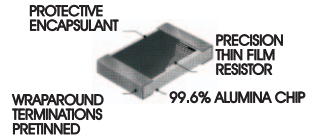




# State of the Art, Inc.

## Thin Film Chip Resistor

M55342/01 RM0502



### PERFORMANCE

Resistance Range **5Ω - 1MΩ**  
 Tolerances **0.1%, 1%, 2%, 5%**  
 Maximum Power **50 mW**  
 Maximum Voltage **40 Volts**

Resistance range for 0.1% tolerance is 100 ohms to 150 K ohms.

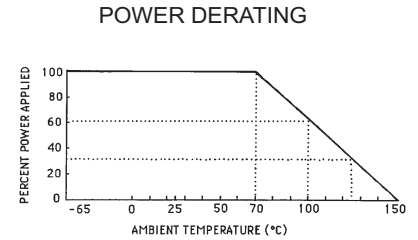
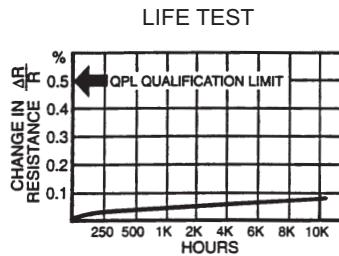
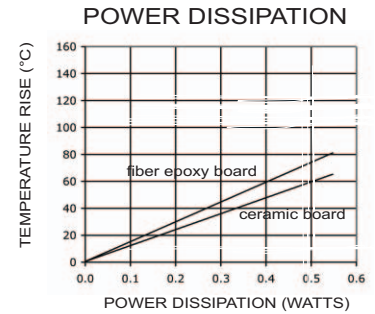
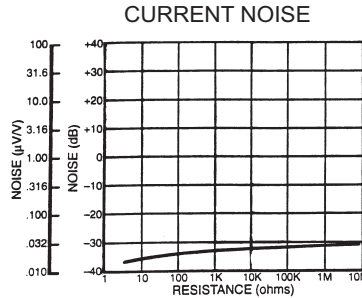
#### TESTS

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\*

	E	H
TCR (-55 to +125 °C) in ppm/°C	±25	±50
Thermal Shock	±0.1%	±0.25%
Low Temperature Operation	±0.1%	±0.25%
Short-time Overload	±0.1%	±0.1%
Resistance to Soldering Heat	±0.2%	±0.25%
Moisture Resistance	±0.2%	±0.4%
Life, 2,000 Hours	±0.5%	±0.5%
High Temperature Exposure	±0.1%	±0.2%

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



### PART NUMBERING

M55342 H 01 B 100D R - TR

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

PRODUCT LEVEL DESIGNATOR: M: 1% per 1000 hrs. R: 0.01% P: 0.1% 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.

A: 0.1% Ω D: 1% Ω G: 2% Ω J: 5% Ω  
 B: 0.1% K Ω E: 1% K Ω H: 2% K Ω K: 5% K Ω  
 C: 0.1% M Ω F: 1% M Ω T: 2% M Ω L: 5% M Ω

TERMINATION MATERIALS: B: Solderable wraparound W: Gold wire bondable

SIZE CODE: /01 = RM0502

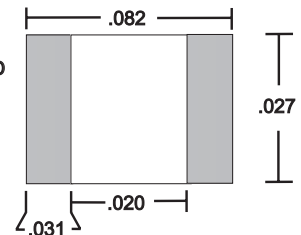
TEMPERATURE CHARACTERISTIC: E: ± 25ppm H: ± 50ppm

PERFORMANCE SPECIFICATION MIL-PRF-55342

### MECHANICAL

	INCHES	MILLIMETERS
Length	.052 (.049 - .061)	1.32 (1.24 - 1.55)
Width	.025 (.020 - .030)	0.64 (0.51 - 0.76)
Thickness	.018 (.010 - .033)	0.46 (0.25 - 0.84)
Top Term	.009 (.005 - .015)	0.23 (0.13 - 0.38)
Bottom Term	.014 (.010 - .020)	0.36 (0.25 - 0.51)
Gap	.024 (.020 - .028)	0.61 (0.51 - 0.71)
Approx. Weight	.00155 grams	

MINIMUM RECOMMENDED MOUNTING PADS (INCHES)



State of the Art, Inc. 2470 Fox Hill Road, State College, PA 16803-1797  
 Phone (814) 355-8004 Fax (814) 355-2714 Toll Free 1-800-458-3401

04/09/08

\*Specifications subject to change without notice.\*

www.resistor.com