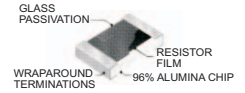




# State of the Art, Inc.

## Thick Film Chip Resistor

### M55342/05 RM2208



### PERFORMANCE

Resistance Range **1Ω - 22MΩ**  
 Tolerances **1%, 2%, 5%, 10%**  
 Maximum Power **225 mW**  
 Maximum Voltage **175 Volts**

#### TESTS

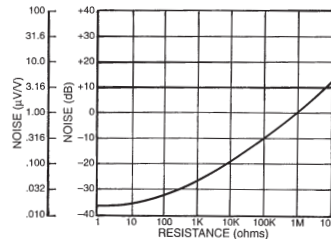
TCR (-55 to +125 °C) in ppm/°C  
 Thermal Shock  
 Low Temperature Operation  
 Short-time Overload  
 Resistance to Soldering Heat  
 Moisture Resistance  
 Life, 2,000 Hours  
 High Temperature Exposure

#### CHARACTERISTICS\*

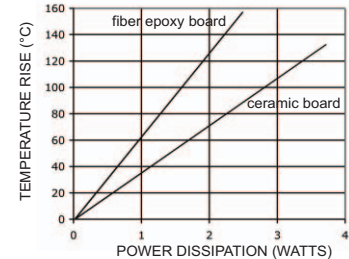
	<b>K</b>	<b>M</b>
TCR (-55 to +125 °C) in ppm/°C	±100	±300
Thermal Shock	±0.5%	±0.5%
Low Temperature Operation	±0.25%	±0.5%
Short-time Overload	±0.25%	±0.5%
Resistance to Soldering Heat	±0.25%	±0.25%
Moisture Resistance	±0.5%	±0.5%
Life, 2,000 Hours	±0.5%	±2.0%
High Temperature Exposure	±0.5%	±1.0%

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

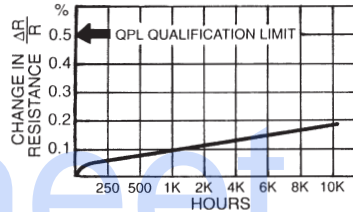
#### CURRENT NOISE



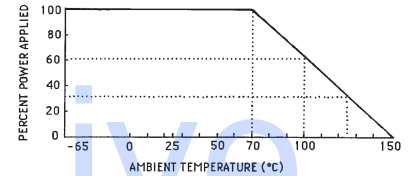
#### POWER DISSIPATION



#### LIFE TEST



#### POWER DERATING



### PART NUMBERING

#### M55342 K 05 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% Ω	G: 2% Ω	J: 5% Ω	M: 10% Ω
E: 1% K Ω	H: 2% K Ω	K: 5% K Ω	N: 10% K Ω
F: 1% M Ω	T: 2% M Ω	L: 5% M Ω	P: 10% M Ω

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: /05 = RM2208

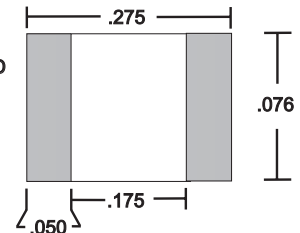
TEMPERATURE CHARACTERISTIC: K: ± 100ppm M: ± 300ppm

PERFORMANCE SPECIFICATION MIL-PRF-55342

### MECHANICAL

	INCHES	MILLIMETERS
Length	.225 (.223 - .237)	5.72 (5.66 - 6.02)
Width	.070 (.070 - .080)	1.78 (1.78 - 2.03)
Thickness	.028 (.015 - .033)	0.71 (0.38 - 0.84)
Top Term	.020 (.015 - .025)	0.51 (0.38 - 0.64)
Bottom Term	.020 (.015 - .025)	0.51 (0.38 - 0.64)
Gap	.185 (.181 - .189)	4.70 (4.60 - 4.80)
Approx. Weight	.0262 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.\*