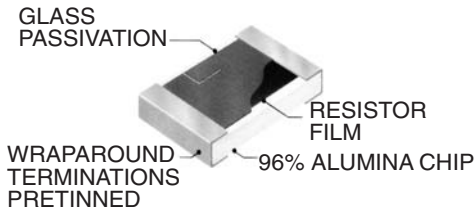




State of the Art, Inc.

M55342/01 Thick Film Chip Resistor

0502 Size, Surface Mount, Solderable



FEATURES

- Tolerances to $\pm 1\%$
- Operating temperature range : -55°C to $+150^{\circ}\text{C}$
- Pretinned (Sn60) nickel barrier terminations
- TCR's to ± 100 ppm
- "S" level qualified manufacturer
- Suitable for solder reflow, vapor phase, or wave solder attachment

PERFORMANCE CHARACTERISTICS

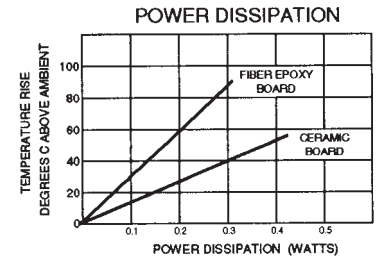
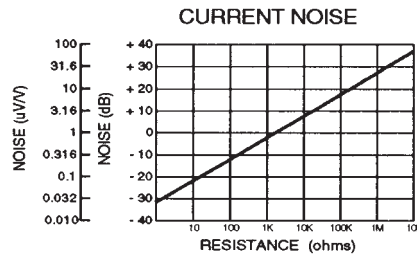
Resistance Range 5.6 Ω - 1M Ω
 Tolerances 1%, 2%, 5% 10%
 Maximum Power 20 mW
 Maximum Voltage 40 Volts

ENVIRONMENTAL PERFORMANCE (1)

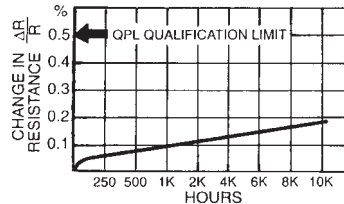
TCR (-55 to $+125^{\circ}\text{C}$ in ppm/ $^{\circ}\text{C}$) < 100 ppm
 Thermal Shock $\pm 0.03\%$
 Low Temperature Operation $\pm 0.02\%$
 Short-time Overload $\pm 0.02\%$
 Resistance to Bonding Exposure $\pm 0.03\%$
 Moisture Resistance $\pm 0.05\%$
 High Temperature Exposure $\pm 0.05\%$
 Life See Chart

(1) Typical resistance change, the maximum is the same as MIL-PRF-55342. Test methods are per MIL-PRF-55342.

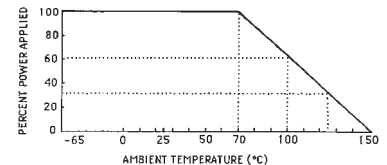
Solderability: Solder coating compatible with Sn60, 62 or 63 solders, provides good wetting with all types of solder attachment. All product is tested IAW Mil-Std-202, method 208, including 8 hour steam aging.



TYPICAL LIFE TEST PERFORMANCE

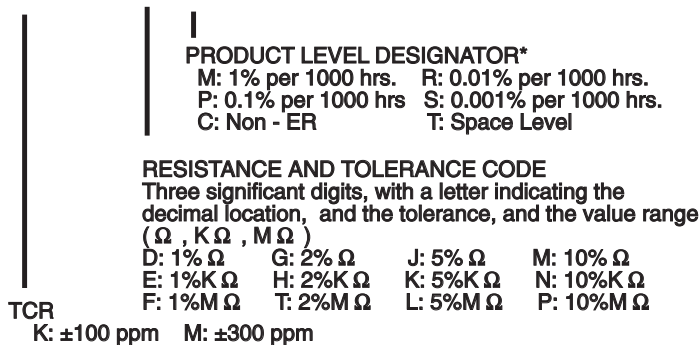


POWER DERATING



PART NUMBERING

M55342 K 01B 100D S



MECHANICAL

	INCHES	MM
Length	.055 ($\pm .006$)	1.40 ($\pm .15$)
Width	.025 ($\pm .005$)	.64 ($\pm .13$)
Thickness	.010 - .033	.25 - .84
Top Term.	.010 ($\pm .005$)	.25 ($\pm .13$)
Bottom Term.	.015 ($\pm .005$)	.38 ($\pm .13$)

Approx. Weight .0016 grams

PACKAGING

Two packaging options are available:

Waffle Pack - (360 per Tray Max.)
 Tape & Reel - (5000 per 7" Inch Reel Max.)

* PRODUCT LEVELS

All product levels are based on the same design as our "S" level failure rate Established Reliability part. Level C is a Non-Established Reliability part requiring no group A, B or C testing. Established Reliability (failure rates based on life testing) product levels M, P, R and S are subject to group A, B and C testing per MIL-PRF-55342. Space product level T requires group A and B tests including 100% power conditioning.

OPTIONS

Termination type C & U (epoxy bondable), wraparound style, and type W (wire bondable) are available. Also available in thin film MIL-PRF-55342 characteristic E & H. SOTA offers a full line of component parts in the 0502 size including Standard Grade, High-Reliability (customer specified testing), and zero-ohm jumpers.

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Where Quality Isn't a Goal...It's Our Tradition

10/24/00