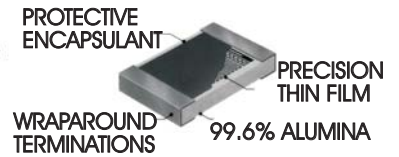




# State of the Art, Inc.

## 0402 Thin Film Chip Resistor

Standard Grade, Wraparound



### PERFORMANCE CHARACTERISTICS

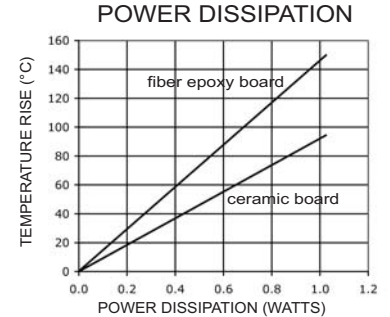
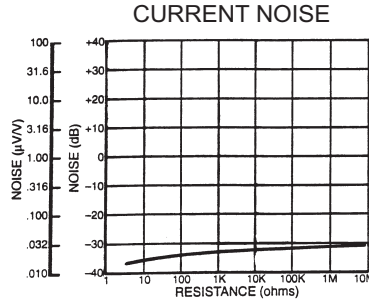
Resistance Range(1)	5.6Ω – 100KΩ
Tolerances (2)	0.1%, 0.25%, 0.5%, 1%, 2%, 5%
TCR	±25, ±50, ±100 ppm
Thermal Resistance	69.3°C/W
Maximum Power	50 mW
Maximum Voltage	40 Volts

- (1) Minimum resistance range at 0.1% tolerance is 100ohms.
- (2) +/- 0.05% limited availability - consult factory

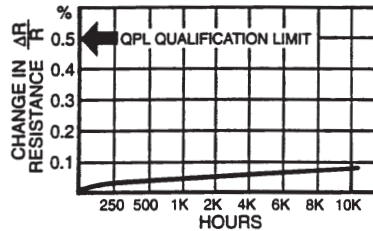
### ENVIRONMENTAL PERFORMANCE (3)

Thermal Shock	±0.02%
Low Temperature Operation	±0.02%
Short-time Overload	±0.02%
Resistance to Bonding Exposure	±0.02%
Moisture Resistance	±0.03%
High Temperature Exposure	±0.03%
Life Test	See Chart

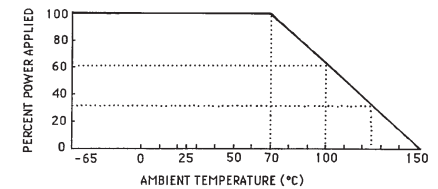
- (3) Typical resistance change, test methods and criteria per MIL-PRF-55342.



### TYPICAL LIFE TEST PERFORMANCE



### POWER DERATING



### PART NUMBERING

**S 0402 C A 1001 F H B - TR**

PACKAGING CODE: - TR = Tape/Reel - W = Waffle Carrier (Default packaging is Bulk)

TERMINATION FINISH: B: Sn60 over nickel barrier W: Gold

TEMPERATURE CHARACTERISTIC TCR: E: ±25 ppm H: ±50 ppm K: ±100 ppm

TOLERANCE: B: 01% C: 0.25% D: 0.5% F: 1% G: 2% J: 5%

#### RESISTANCE VALUE:

Three or Four digits are used, with all leading digits significant. Four digits are used for 1% tolerance or lower; otherwise, three digits are used. The last digit specifies the number of zeros to add. The letter "R" is used to represent the decimal for fractional ohmic values. Example: 5R6 is 5.6 ohms.

PRODUCT DESIGNATION: A: Thin film on alumina

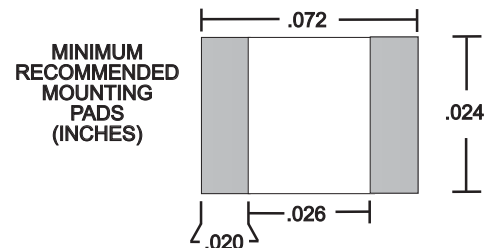
TERMINATION TYPE: C: Wraparound termination

#### SIZE CODE

GRADE: S: Standard Production H: High Reliability (For Screening options, contact the factory)

### MECHANICAL

	INCHES	MILLIMETERS
Length	.042 (.040 - .048)	0.83 (0.78 - 0.97)
Width	.022 (.020 - .024)	0.56 (0.51 - 0.61)
Thickness	.017 (.013 - .023)	0.38 (0.38 - 0.58)
Top Term	.005 (.002 - .015)	0.13 (0.05 - 0.30)
Bottom Term	.009 (.005 - .015)	0.21 (0.08 - 0.33)
Gap	.024 (.020 - .028)	0.42 (0.32 - 0.52)
Approx. Weight	0.0010 grams	



\*Specifications subject to change without notice.\*

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