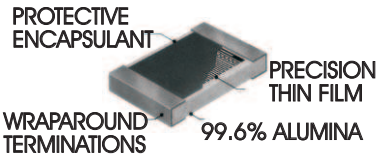
State of the Art, Inc.

0302 Thin Film Chip Resistor

Standard Grade, Wraparound

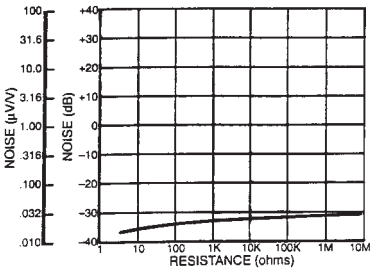


PERFORMANCE CHARACTERISTICS

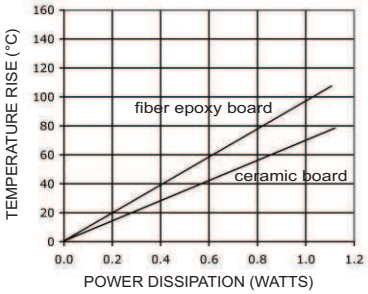
Resistance Range(1)	5.6Ω – 75KΩ
Tolerances (2)	0.1%, 0.25%, 0.5%,1%, 2%, 5%
TCR	±25, ±50, ±100 ppm
Thermal Resistance	72.3°C/W
Maximum Power	40 mW
Maximum Voltage	15 Volts

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

CURRENT NOISE



POWER DISSIPATION

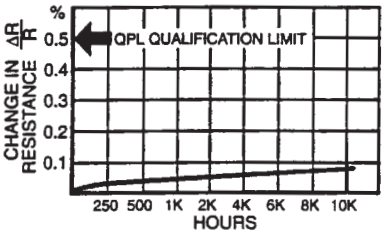


ENVIRONMENTAL PERFORMANCE (3)

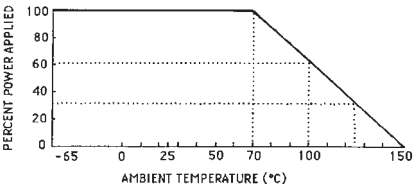
Thermal Shock	±0.02%
Low Temperature Operation	±0.02%
Short-time Overload	±0.02%
Resistance to Bonding Exposure	±0.02%
Moisture Resistance	±0.03%
High Temperature Exposure	±0.03%
Life Test	See Chart

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

TYPICAL LIFE TEST PERFORMANCE



POWER DERATING



PART NUMBERING

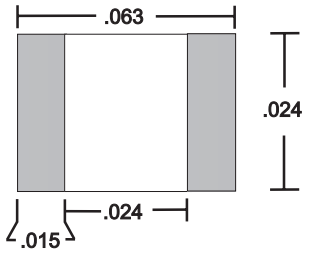
S 0302 C A 1001 F H B - TR

- 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	.033 (.031 -.038)	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 -.012)	0.13 (0.05 - 0.30)
Bottom Term	.008 (.003 -.013)	0.21 (0.08 - 0.33)
Gap	.017 (.013 -.021)	0.42 (0.32 - 0.52)
Approx. Weight	.0008 grams	

MINIMUM RECOMMENDED MOUNTING PADS (INCHES)



"Specifications subject to change without notice."

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