



State of the Art, Inc.

0402 Thin Film Chip Resistor

Standard Grade, Surface Mount, Solderable

PROTECTIVE
ENCAPSULANT



99.6% ALUMINA CHIP

PRECISION
THIN FILM
RESISTOR

FEATURES

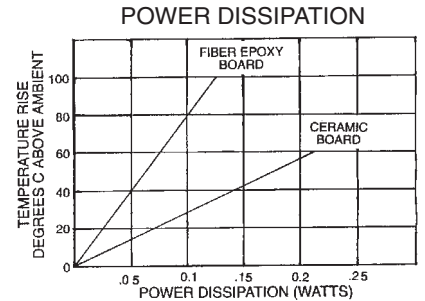
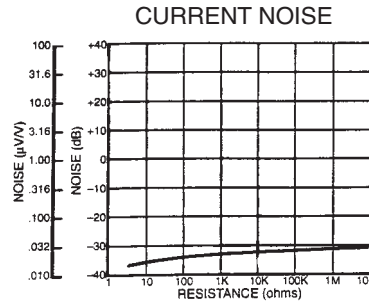
- Tolerances to $\pm 0.1\%$
- Operating temperature range : -55°C to $+150^{\circ}\text{C}$
- For high-density hybrid circuits where space is at a premium
- TCR's to ± 25 ppm
- Made with the same materials and process as our MIL-PRF-55342 "S" level qualified chips
- Delivers greater power handling capability with lighter weight construction

PERFORMANCE CHARACTERISTICS

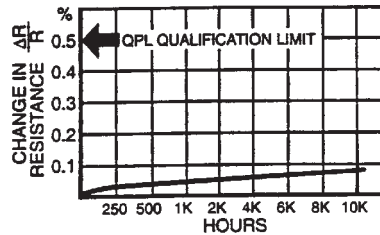
Resistance Range	$5\Omega - 90\text{K}\Omega$
Tolerances	0.1%, 0.25%, 0.5%, 1%, 2%, 5%, 10%
Maximum Power	50 mW
Maximum Voltage	40 Volts

ENVIRONMENTAL PERFORMANCE (3)

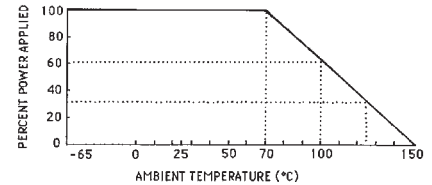
TCR (-55 to $+125^{\circ}\text{C}$ in ppm/ $^{\circ}\text{C}$)	< 25 ppm
Thermal Shock	$\pm 0.02\%$
Low Temperature Operation	$\pm 0.02\%$
Short-time Overload	$\pm 0.02\%$
Resistance to Bonding Exposure	$\pm 0.02\%$
Moisture Resistance	$\pm 0.03\%$
High Temperature Exposure	$\pm 0.03\%$
Life	See Chart



TYPICAL LIFE TEST PERFORMANCE



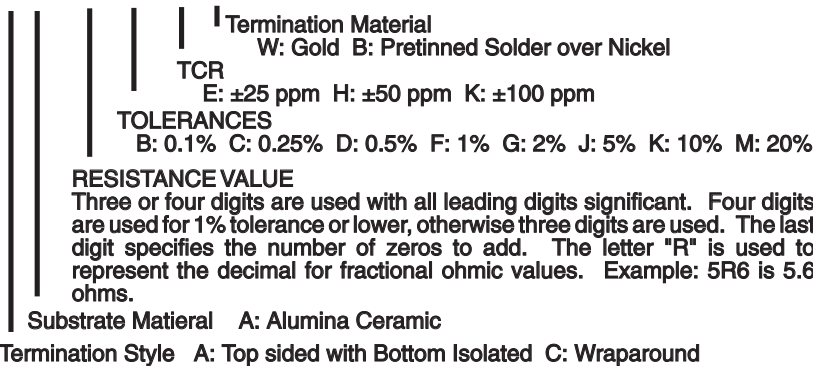
POWER DERATING



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

PART NUMBERING

S0402AA 150 J H W



MECHANICAL

	INCHES	MM
Length	.040 (+.002/-0.002)	1.02 (+.05/-0.05)
Width	.020 (+.002/-0.002)	.51 (+.05/-0.05)
Thickness	.009 - .012	.23 - .30
Top Term.	.005 - .015	.13 - .38

Approx. Weight .00108 grams

All product is tested IAW Mil-Std-202, method 208, including 8 hour steam aging.

PACKAGING

Two packaging options are available:

- Bulk Packaging - (5000 per Bag Max.)
- Waffle Pack - (400 per Tray Max.)

OPTIONS

SOTA offers a full line of component parts in the 0402 size including High-Reliability (customer specified testing). Available options are epoxy bondable and wire bondable terminations, and custom part marking.

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08/08/00

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