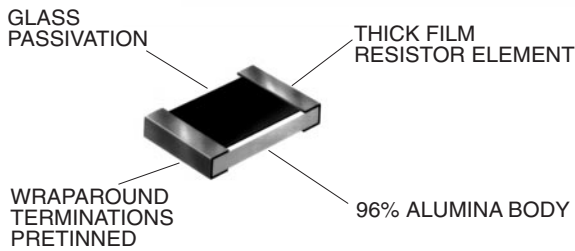


State of the Art, Inc.

HIGH VOLTAGE Chip Resistor

3818 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
- Made with the same materials and process as our MIL-PRF-55342 "S" level qualified chips
- Suitable for solder reflow, vapor phase, or wave solder attachment

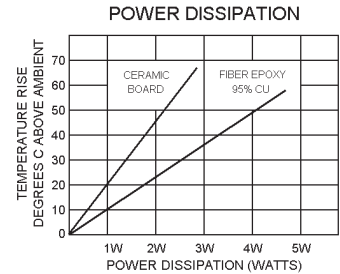
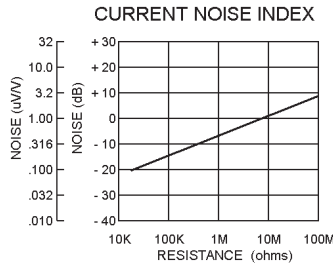
PERFORMANCE CHARACTERISTICS

Resistance Range: 20K Ω - 100M Ω
 Tolerances: 1%, 2%, 5%, 10%, 20%
 Maximum Power: 3000 mW
 Maximum Voltage: 2500 Volts

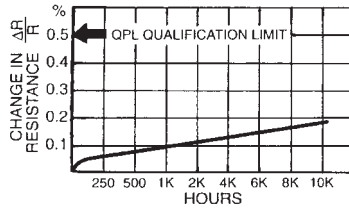
ENVIRONMENTAL PERFORMANCE (*)

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

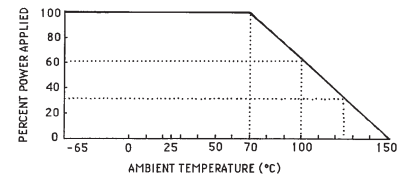
(*) Typical resistance change, the maximum is the same as MIL-PRF-55342. Test methods are per Mil-PRF-55342.



TYPICAL LIFE TEST PERFORMANCE

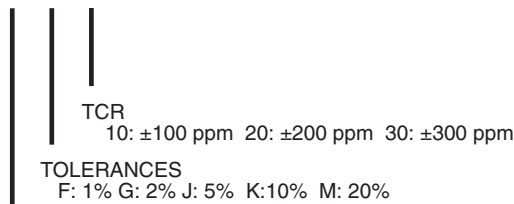


POWER DERATING



PART NUMBERING

S3818CVX 105 J 20



RESISTANCE VALUE: Three digits are used with all leading digits significant. The last digit specifies the number of zeros to add.

MECHANICAL

	INCHES	MM
Length	.375 (+.010/- .005)	9.52 (+.25/- .13)
Width	.180 (+.008/- .005)	4.57 (+.20/- .13)
Thickness	.025 - .032	.64 - .81
Top Term.	.025 - .045	.64 - 1.14
Bottom Term.	.055 - .075	1.4 - 1.9

Approx. Weight .12 grams

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.

PACKAGING

Packaging options are available:

- Bulk Packaging - (900 per Bag Max.)
- Waffle Pack

OPTIONS

SOTA offers a full line of component parts in the 3818 size including High-Reliability (customer specified testing). Available options are epoxy bondable and wire bondable terminations, and custom part marking.

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

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

06/24/98