

Features

- RoHS compliant*
- Concave termination style
- 2 or 4 isolated elements in an 06 package width
- Resistance tolerance: $\pm 5\%$
- Resistance range: 10 ohms to 1 megohm & zero-ohm jumper

- Sulfur-resistant design



This series is obsolete.

CAT16-AS Series - Sulfur-Resistant Thick Film Chip Arrays

General Characteristics

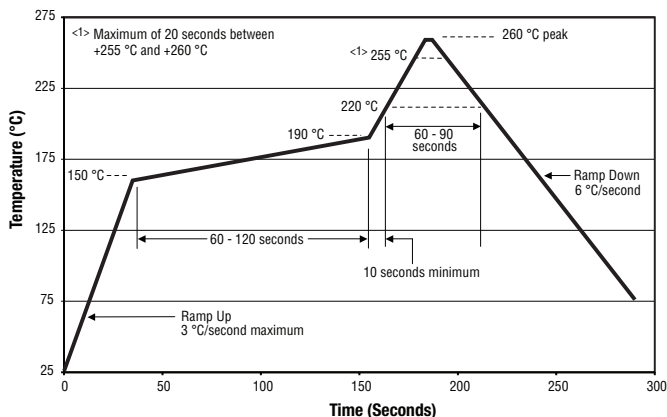
Characteristic	CAT16-AS
Number of Elements (Isolated)	2 or 4
Power Rating @ 70 °C per Resistor	63 mW
Resistor Tolerance	$\pm 5\%$
Resistance Range (E24) plus Zero-ohm Jumper	10 ohms to 1 megohm
Temperature Coefficient of Resistance (TCR)	± 200 ppm
Maximum Overload Voltage	100 V
Maximum Working Voltage	50 V
Operating Temperature Range	-55 to +125 °C
Storage Conditions	+5 ~ +40 °C, 25~75 % RH, 1 year
Derating Temperature	+70 °C
Packaging (Paper Tape)	5,000 pcs. per reel
Zero-ohm Jumper: Current Rating Maximum Resistance	1 A per element 50 milliohms

Environmental Characteristics

Specification	Test Method (JIS C 5201-1)	Characteristics
Short Time Overload	Rated voltage x 2.5, 5 seconds	$\pm(2\% + 0.1 \text{ ohm})$
Soldering Heat	+260 °C ± 5 °C, 10 ± 1 seconds	$\pm(1\% + 0.05 \text{ ohm})$
Temperature Cycling	-55 °C (30 minutes) - normal (30 minutes) +125 °C (30 minutes) - normal (30 minutes), 5 cycles	$\pm(1\% + 0.05 \text{ ohm})$
Moisture Load Life	+40 °C ± 2 °C, rated voltage, 90 minutes ON, 30 minutes OFF, 1000 hours	$\pm(3\% + 0.1 \text{ ohm})$
Load Life	+70 °C, rated voltage, 90 minutes ON, 30 minutes OFF, 1000 hours	$\pm(3\% + 0.1 \text{ ohm})$
Sulfur Test	3 ppm H ₂ S, +50 °C, 90~95 % RH, 100 hours	$\pm(5\% + 0.1 \text{ ohm})$

NOTE: Zero-ohm jumper <50 milliohms except sulfur test <100 milliohms.

Soldering Profile



Additional Information

Click these links for more information:



PRODUCT



TECHNICAL LIBRARY



INVENTORY



SAMPLES



CONTACT

How To Order

CA T 16 - 103 J 4 AS

Chip Array _____

Type _____

- T = Concave

Model _____

- 16 = 06 Package Width

Resistance Code _____

- First two digits are significant, third digit represents number of zeros to follow (example: 103 = 10K ohms)
- 000 = Zero-ohm jumper

Resistance Tolerance _____

- J = $\pm 5\%$

Resistors _____

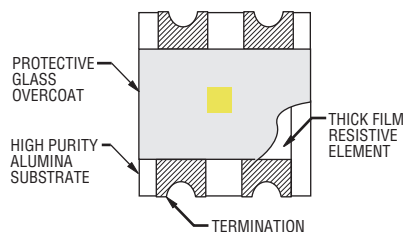
- 2 = 2 Resistors
- 4 = 4 Resistors

Special Characteristics _____

- AS = Sulfur-resistant, Tin-plated terminations (RoHS compliant)

For Standard Values Used in Capacitors, Inductors, and Resistors, [click here](#).

Construction



WARNING Cancer and Reproductive Harm

www.P65Warnings.ca.gov

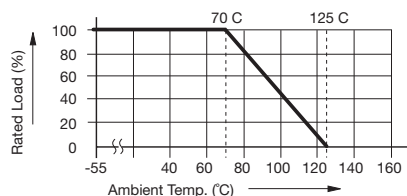
*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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CAT16-AS Series - Sulfur-Resistant Thick Film Chip Arrays

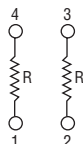
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Derating Curve

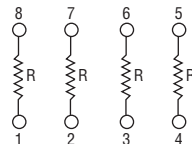


Isolated Circuits

CAT16-xxxJ2AS



CAT16-xxxJ4AS



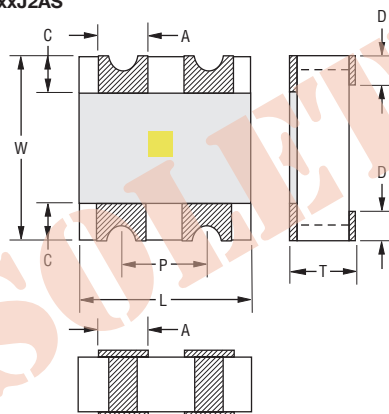
Typical Part Marking

Marking.....Refer to Product Dimensions
 Marking Color.....Yellow
 Zero-ohm Jumper Marking000

Product Dimensions

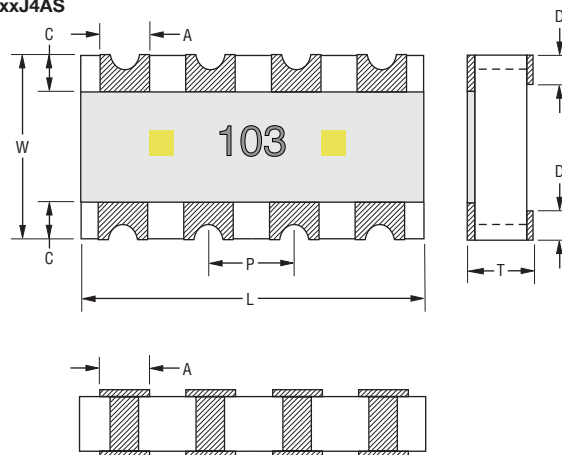
Dim.	CAT16-xxx-J2AS
L	1.60 ± 0.15 (0.063 ± 0.006)
W	1.60 ± 0.15 (0.063 ± 0.006)
A	0.50 ± 0.15 (0.020 ± 0.006)
C	0.35 ± 0.15 (0.014 ± 0.006)
D	0.40 ± 0.15 (0.016 ± 0.006)
T	0.45 ± 0.10 (0.018 ± 0.004)
P	0.80 (0.031)

CAT16-xxxJ2AS



Dim.	CAT16-xxx-J4AS
L	3.20 ± 0.15 (0.126 ± 0.006)
W	1.60 ± 0.15 (0.063 ± 0.006)
A	0.50 ± 0.15 (0.020 ± 0.006)
C	0.35 ± 0.15 (0.014 ± 0.006)
D	0.40 ± 0.15 (0.016 ± 0.006)
T	0.45 ± 0.10 (0.018 ± 0.004)
P	0.80 (0.031)

CAT16-xxxJ4AS



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

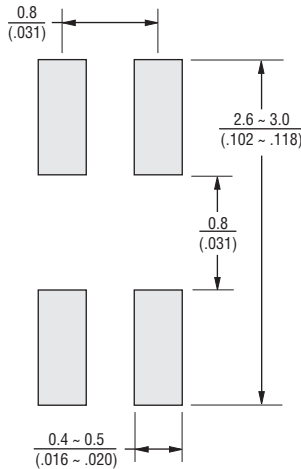
Specifications are subject to change without notice.

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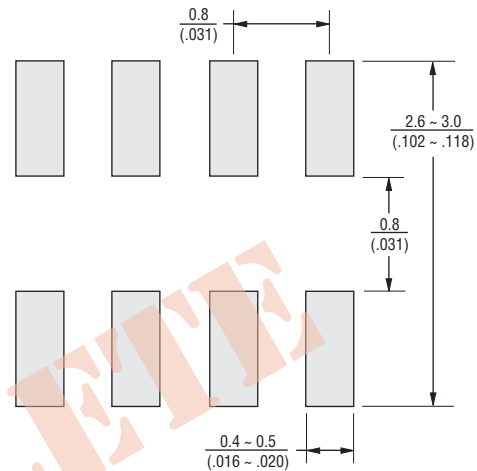
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CAT16-xxxJ2AS



CAT16-xxxJ4AS



Technical drawing of a mechanical part with dimensions and tolerances. The drawing includes a side view and a cross-section view (labeled 3 and 2). Dimensions are given in millimeters (mm) with tolerances in parentheses.

Dimensions and Tolerances:

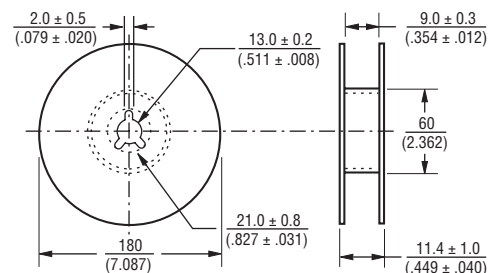
- Top horizontal dimension: 4.00 ± 0.10 ($.157 \pm .004$)
- Top horizontal dimension (left): 2.00 ± 0.05 ($.079 \pm .002$)
- Top horizontal dimension (right): $1.50 + 0.10/-0$ ($.059 + .004/-0$)
- Top horizontal dimension (right): 1.75 ± 0.10 ($.069 \pm .004$)
- Right vertical dimension (top): 3.50 ± 0.05 ($.138 \pm .002$)
- Right vertical dimension (middle): 8.00 ± 0.30 ($.315 \pm .012$)
- Right vertical dimension (bottom): 2.75 ± 0.10 ($.108 \pm .004$)
- Bottom horizontal dimension (left): 2.00 ± 0.05 ($.079 \pm .002$)
- Bottom horizontal dimension (middle): 4.00 ± 0.10 ($.157 \pm .004$)
- Bottom horizontal dimension (right): 0.80 ± 0.20 ($.031 \pm .008$)

Other features include a central hole labeled "DIA.", a cross-section view labeled "3" and "2", and a dimension line labeled "B".



Dim.	CAT16-xxx-J2AS	CAT16-xxx-J4AS
A	$\frac{1.85 \pm 0.05}{(0.073 \pm 0.002)}$	$\frac{2.00 +0.10/-0.15}{(0.079 +0.004/-0.006)}$
B	$\frac{1.85 \pm 0.05}{(0.073 \pm 0.002)}$	$\frac{3.57 +0.10/-0.15}{(0.141 +0.004/-0.006)}$

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$



BOURNS®

Tel: +886-2 2562-4117

Europe:

Tel: +36 88 885 877

Email: eurocus@bourns.com

The Americas:

Tel: +1-951 781-5500

Email: americus@bourns.com

www.bourns.com

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