

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

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

General Characteristics

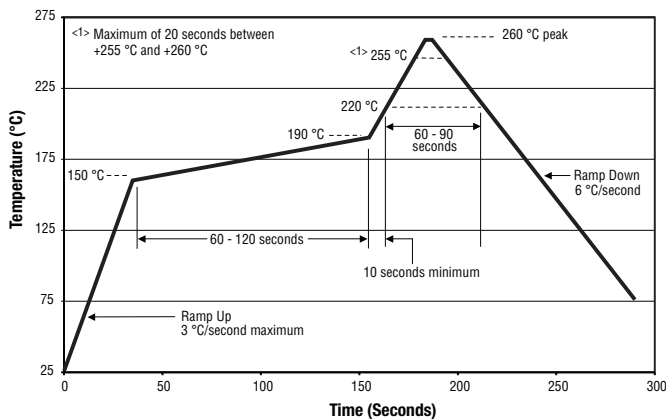
Characteristic	CAT16-AS
Number of Elements (Isolated)	2 or 4
Power Rating @ 70 °C per Resistor	63 mW
Resistor Tolerance	$\pm 5\%$
Resistance Range (E24) plus Zero-ohm Jumper	10 ohms to 1 megohm
Temperature Coefficient of Resistance (TCR)	± 200 ppm
Maximum Overload Voltage	100 V
Maximum Working Voltage	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:

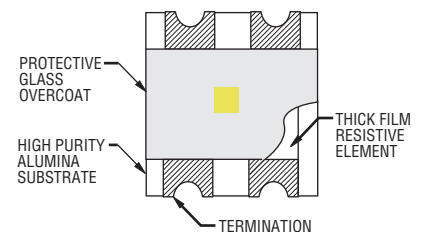


How To Order

- Chip Array **CA T 16 - 103 J 4 AS**
- 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

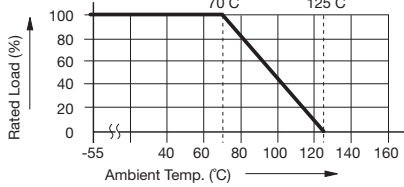
*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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

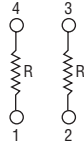


Derating Curve

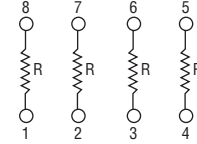


Isolated Circuits

CAT16-xxxJ2AS



CAT16-xxxJ4AS



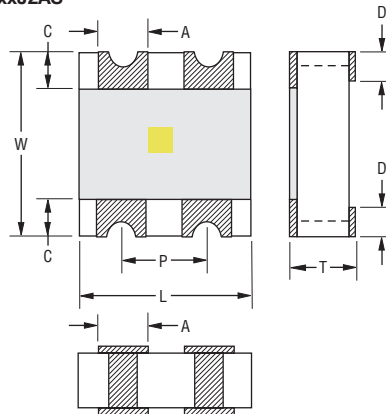
Typical Part Marking

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

Product Dimensions

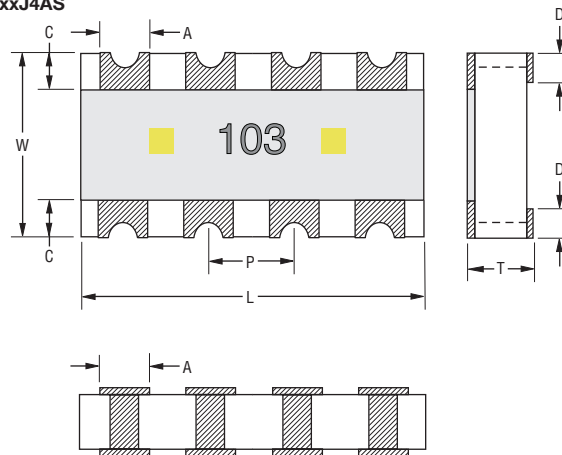
Dim.	CAT16-xxx-J2AS
L	$\frac{1.60 \pm 0.15}{(0.063 \pm 0.006)}$
W	$\frac{1.60 \pm 0.15}{(0.063 \pm 0.006)}$
A	$\frac{0.50 \pm 0.15}{(0.020 \pm 0.006)}$
C	$\frac{0.35 \pm 0.15}{(0.014 \pm 0.006)}$
D	$\frac{0.40 \pm 0.15}{(0.016 \pm 0.006)}$
T	$\frac{0.45 \pm 0.10}{(0.018 \pm 0.004)}$
P	$\frac{0.80}{(0.031)}$

CAT16-xxxJ2AS



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

CAT16-xxxJ4AS



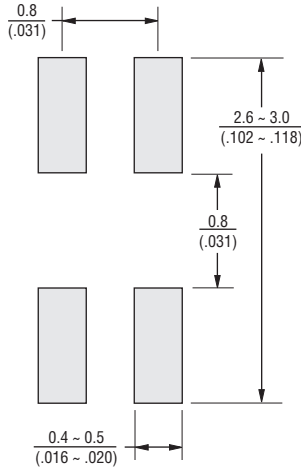
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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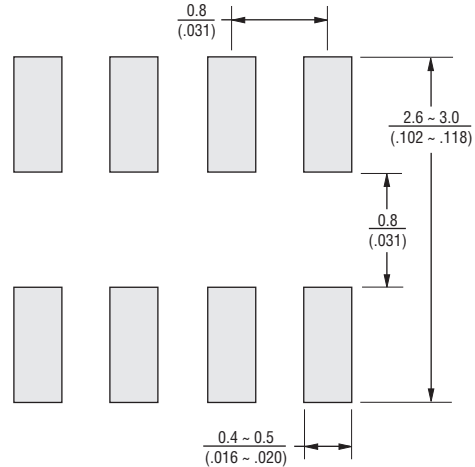


Recommended Land Patterns

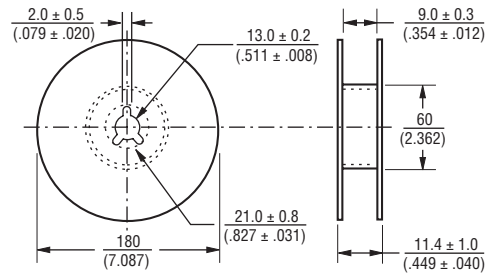
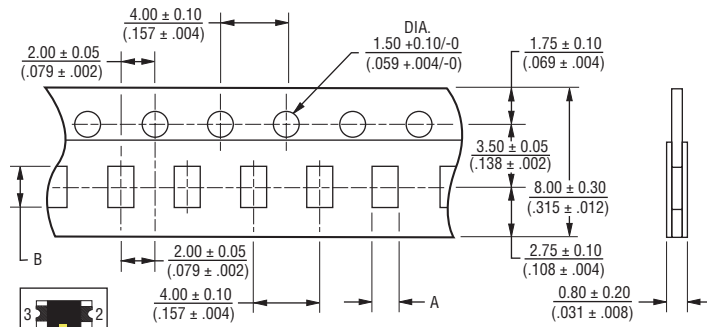
CAT16-xxxJ2AS



CAT16-xxxJ4AS



Packaging Specifications



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



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REV 02/21

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