



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



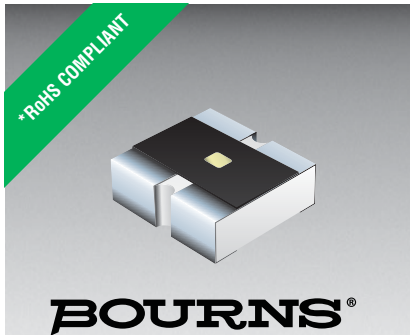
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## Features

- RoHS compliant\*
- Convex termination style
- 2 isolated elements in an 02 package width
- Resistance tolerance:  $\pm 5\%$
- Resistance range: 10 ohms to 1 megohm & zero-ohm jumper
- Sulfur-resistant design

## CAY06-AS Series - Sulfur-Resistant Thick Film Chip Arrays

### General Characteristics

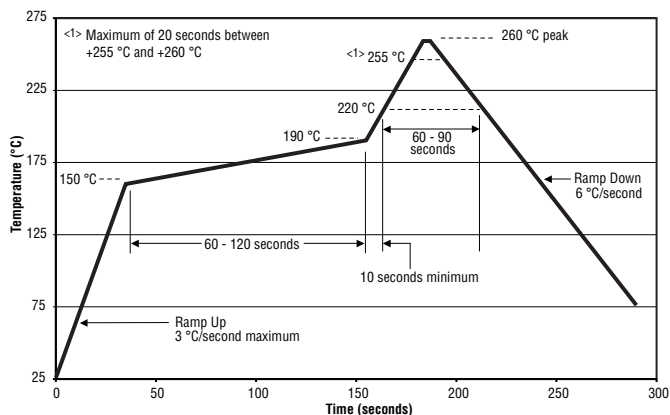
Characteristic	CAY06-AS
Number of Elements (Isolated)	2
Power Rating @ 70 °C per Resistor	31 mW
Resistor Tolerance	$\pm 5\%$
Resistance Range (E24) plus Zero-ohm Jumper	10 ohms to 1 megohm
Temperature Coefficient of Resistance (TCR)	$\pm 200$ ppm
Maximum Overload Voltage	25 V
Maximum Working Voltage	12.5 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)	10,000 pcs. per reel
Zero-ohm Jumper: Current Rating Maximum Resistance	1 A per element 100 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 $\pm 5$ °C, 10 $\pm 1$ seconds	$\pm(1\% + 0.05 \text{ ohm})$
Temperature Cycling	-55 °C (30 minutes) - normal (2~3 minutes) +125 °C (30 minutes) - normal (2~3 minutes), 5 cycles	$\pm(1\% + 0.05 \text{ ohm})$
Moisture Load Life	+40 °C, 90~95 % RH, 1000 hours, 1.5 hours ON, 0.5 hours OFF	$\pm(3\% + 0.1 \text{ ohm})$
Load Life	+70 °C, 1000 hours, 1.5 hours ON, 0.5 hours OFF	$\pm(3\% + 0.1 \text{ ohm})$
Sulfur Test	3 ppm H <sub>2</sub> S, +50 °C, 90~95 % RH, 100 hours	$\pm(5\% + 0.1 \text{ ohm})$

NOTE: Zero-ohm jumper <100 milliohms.

### Soldering Profile



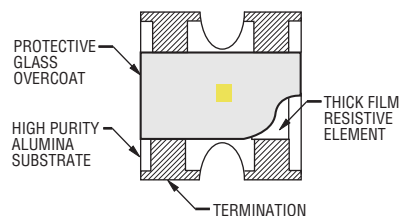
### How To Order

**CA Y 06 - 103 J 2 AS**

Chip Array — CA  
 Type — Y  
 • Y = Convex  
 Model — 06  
 • 06 = 02 Package Width  
 Resistance Code — 103  
 • First two digits are significant, third digit represents number of zeros to follow (example: 103 = 10K ohms)  
 • 000 = Zero-ohm jumper  
 Resistance Tolerance — J  
 • J =  $\pm 5\%$   
 Resistors — 2  
 • 2 = 2 Resistors  
 Special Characteristics — AS  
 • AS = Sulfur-resistant, Tin-plated terminations (RoHS compliant)

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

### Construction



\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

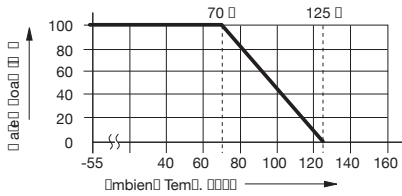
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

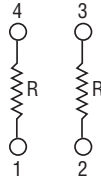
# CAY06-AS Series - Sulfur-Resistant Thick Film Chip Arrays



## Derating Curve



## Isolated Circuit

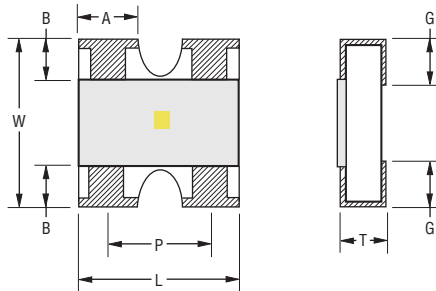


## Typical Part Marking

Marking.....Refer to Product Dimensions  
Marking Color.....Yellow

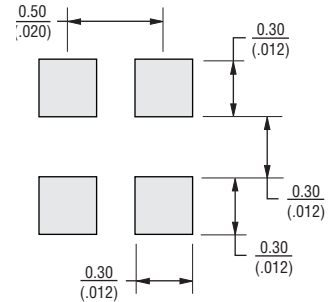
## Product Dimensions

Dim.	CAY06-AS
L	$\frac{0.85 \pm 0.05}{(0.033 \pm 0.002)}$
W	$\frac{0.60 \pm 0.05}{(0.024 \pm 0.002)}$
T	$\frac{0.35 \pm 0.05}{(0.014 \pm 0.002)}$
P	$\frac{0.50 \pm 0.05}{(0.020 \pm 0.002)}$
A	$\frac{0.37 \pm 0.05}{(0.015 \pm 0.002)}$
B	$\frac{0.11 \pm 0.05}{(0.004 \pm 0.002)}$
G	$\frac{0.17 \pm 0.05}{(0.007 \pm 0.002)}$

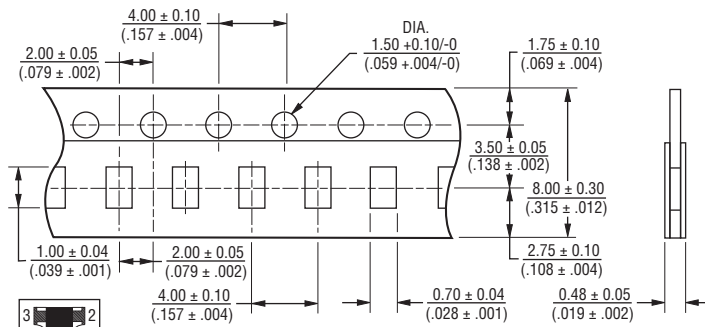


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

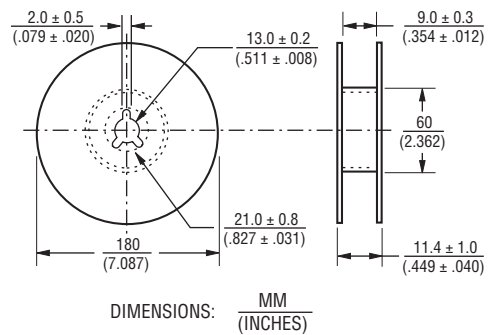
## Recommended Land Pattern



## Packaging Specifications



ORIENTATION OF PART IN TAPE



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



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