



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!



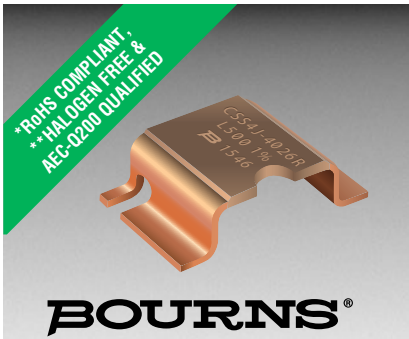
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Features

- EB welded metal strip
- Very high power
- Excellent long term stability
- Low resistance, low TCR
- Low thermal EMF
- RoHS compliant* and halogen free**
- AEC-Q200 qualified

Applications

- Current sensing
- Voltage division
- Battery management systems
- Power modules
- Frequency converters
- Industrial

Model CSS4J-4026 Series Current Sense Resistor

Electrical Characteristics

Characteristic	Model CSS4J-4026 Series	
	Resistance Range / Power Rating @70 °C ¹ / Power Rating @130 °C ¹	CSS4J-4026R-L200x
CSS4J-4026R-L300x		0.3 mΩ / 5 W
CSS4J-4026R-L500x		0.5 mΩ / 5 W
CSS4J-4026R-1L00x		1.0 mΩ / 4 W
CSS4J-4026K-2L00x		2.0 mΩ / 4 W
CSS4J-4026K-3L00x		3.0 mΩ / 3 W
Operating Temperature Range	-55 to +170 °C	
TCR - Resistive Alloy ²	±50 PPM/°C (20~60 °C)	
Temperature Coefficient	CSS4J-4026R-L200x	±150 PPM/°C
	CSS4J-4026R-L300x	±100 PPM/°C
	CSS4J-4026R-L500x	±100 PPM/°C
	CSS4J-4026R-1L00x	±75 PPM/°C
	CSS4J-4026K-2L00x	±75 PPM/°C
	CSS4J-4026K-3L00x	±75 PPM/°C
Resistance Tolerance	±1 %, ±5 %	

¹ Terminal temperature

² For full TCR range, refer to TCR curve

How to Order

CSS 4J - 4026 R - 1L00 F

Model _____
 No. of Terminals & Style _____
 Size _____
 Material Type _____
 (See Part Number Table)
 Resistance Code (milliohms) _____
 "L" represents decimal point
 (examples: L500 = .500 milliohms;
 1L00 = 1.00 milliohms)
 Resistance Tolerance _____
 F = ±1 %
 J = ±5 %
 Packaging size _____
 Blank = Standard 13" reel
 E = Mini 7" reel

Environmental Characteristics

Characteristic	Test Condition	ΔR Max.
Thermal Shock	-55 to +150 °C / 2000 Cycles	0.50 %
Short Time Overload	5 Times Rated Power for 5 Second Duration	0.50 %
Resistance to Soldering Heat	+260 °C / 10 Seconds	0.50 %
High Temperature Exposure	+170 °C / 2000 Hours	1.00 %
Low Temperature Storage	-65 °C / 24 Hours	0.10 %
Biased Humidity Test	+85 °C, 85 %R.H., 1000 Hours	0.50 %
Moisture Resistance	10 Days with Cold Shock, No Load	0.20 %
Mechanical Shock	100 g, 6 ms half sine	0.20 %
Vibration, High Frequency	20 g, 10-2000 Hz	0.20 %
Load Life	2000 Hours, Max. Load, Terminal Temperature 130 °C	1.00 %
Solderability	J-STD-002	95 % Coverage Min.
ESD	AEC-Q200-002, 25 kV	0.25 %
Board Flex	60 Sec. Min. Holding Time	0.25 %

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

**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

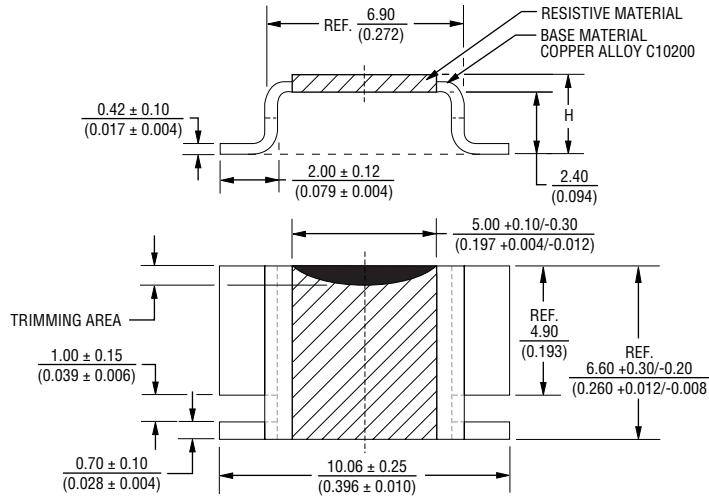
Specifications are subject to change without notice.

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.

Model CSS4J-4026 Series Current Sense Resistor

BOURNS®

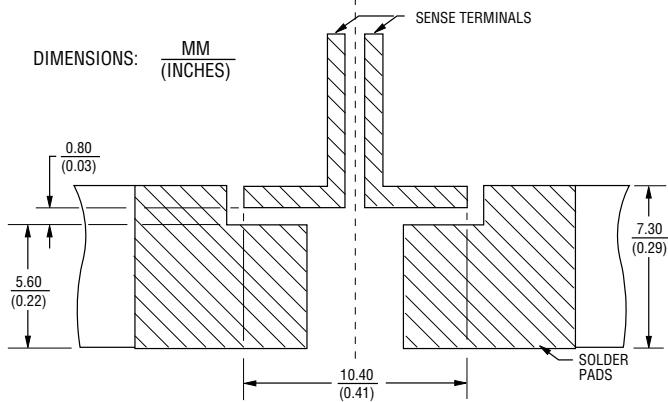
Product Dimensions



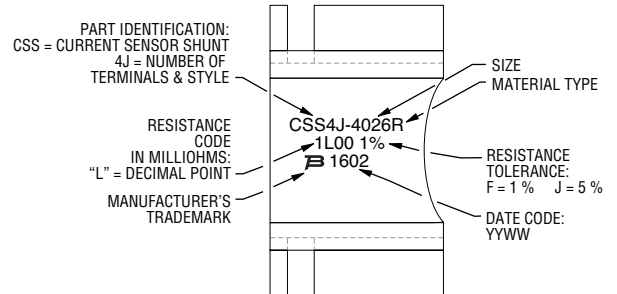
Part Number	Dimension H
CSS4J-4026R-L200x	4.01 ± 0.2 (0.161 ± 0.008)
CSS4J-4026R-L300x	3.45 ± 0.2 (0.136 ± 0.008)
CSS4J-4026R-L500x	3.04 ± 0.2 (0.120 ± 0.008)
CSS4J-4026R-1L00x	2.82 ± 0.2 (0.111 ± 0.008)
CSS4J-4026K-2L00x	2.94 ± 0.2 (0.116 ± 0.008)
CSS4J-4026K-3L00x	2.82 ± 0.2 (0.111 ± 0.008)

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

Recommended Pad Layout



Typical Part Marking



Specifications are subject to change without notice.

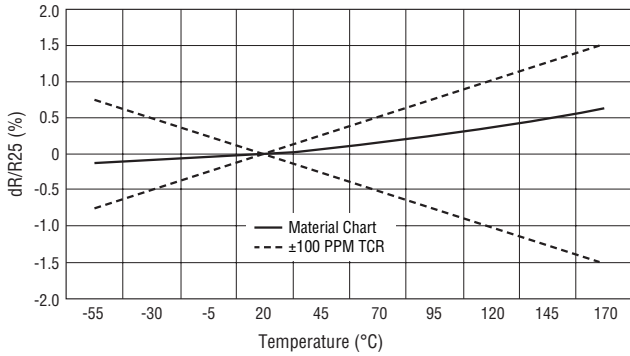
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

Model CSS4J-4026 Series Current Sense Resistor

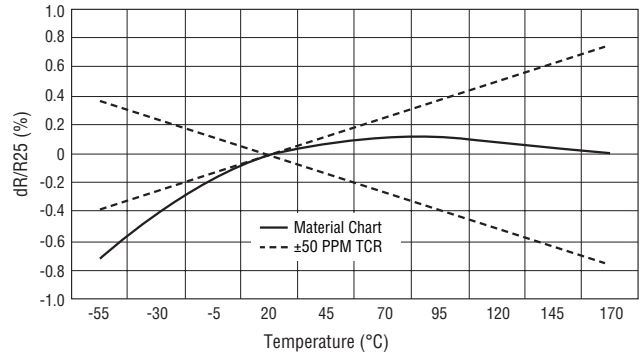


TCR Curves

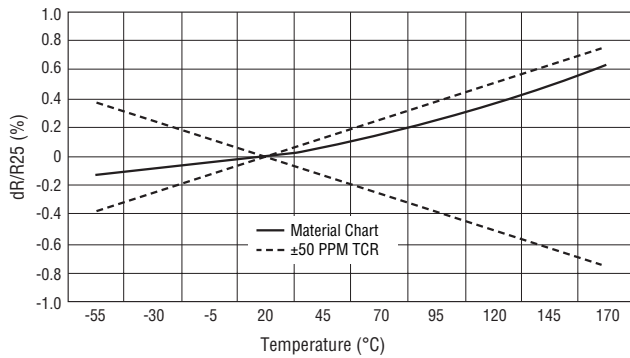
K-Type Resistive Material



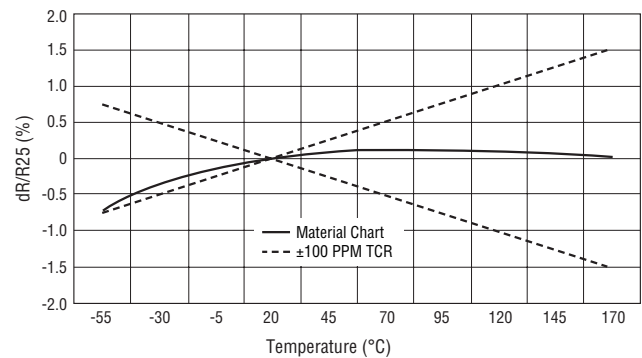
R-Type Resistive Material



K-Type Resistive Material

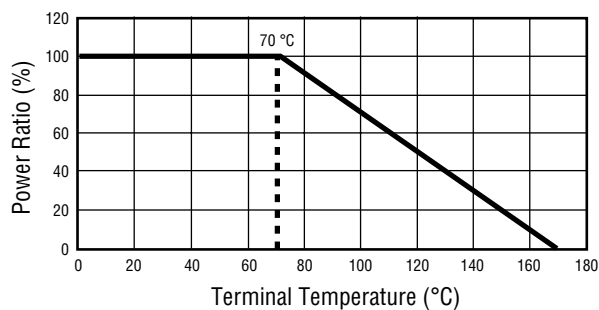


R-Type Resistive Material

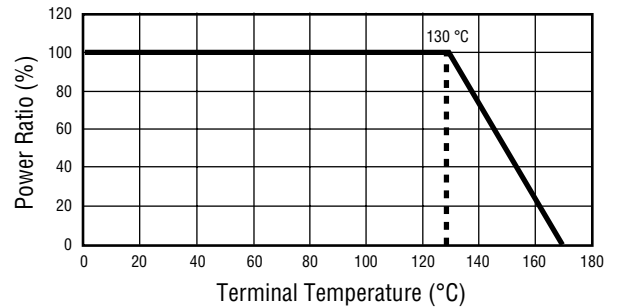


Power Derating Curves

@70 °C



@130 °C



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.

Model CSS4J-4026 Series Current Sense Resistor

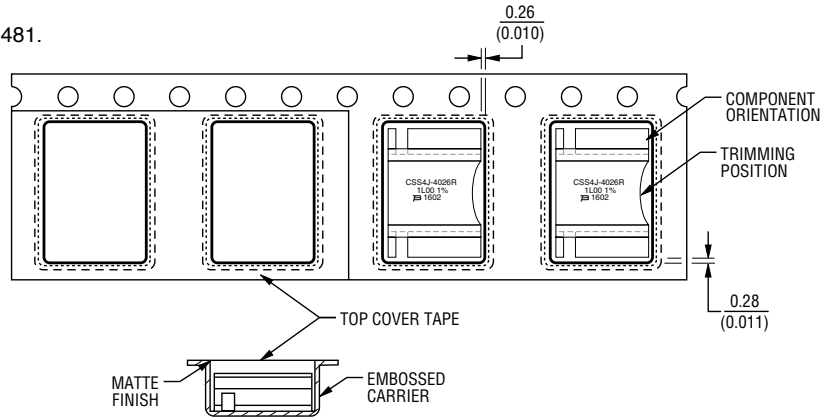
BOURNS®

Packaging Specifications

Components packaged on plastic tape & reel per EIA-481.

Standard Reel Size: 13 inches
Tape Width: 16 mm
Quantity: 1,500 pcs. per reel

Mini-Reel Size: 7 inches
Tape Width: 16 mm
Quantity: 400 pcs. per reel



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

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

REV. 11/30/16

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.