

### Features

- EB welded metal strip
- Very high power
- Excellent long term stability
- Low resistance, low TCR
- Low thermal EMF
- RoHS compliant\*

### 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 @ 130 °C**	CSS4J-4026R-L500x
CSS4J-4026R-1L00x		1.0 mΩ / 4 W
CSS4J-4026K-2L00x		2.0 mΩ / 4 W
CSS4J-4026K-5L00x		5.0 mΩ / 3 W
Operating Temperature Range	-55 to +170 °C	
TCR - Resistive Alloy***	≤+50 PPM/°C (20~60 °C)	
Resistance Tolerance	±1 %, ±5 %	

\*\* Terminal temperature.

\*\*\* 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)

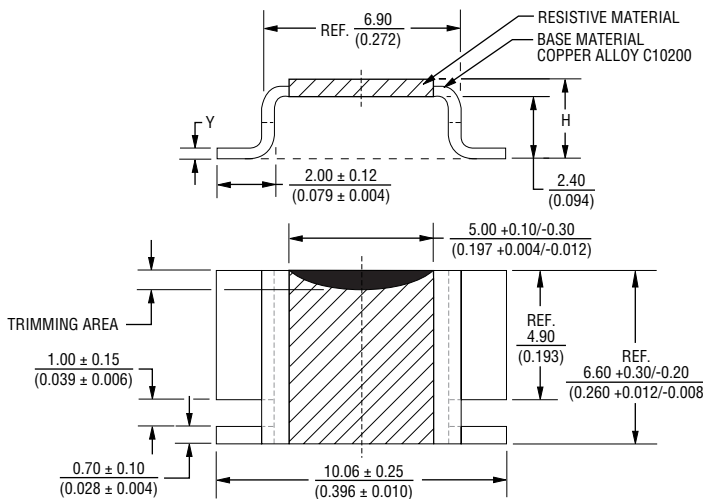
Resistance Tolerance \_\_\_\_\_  
F = ±1 %  
J = ±5 %

Packaging size \_\_\_\_\_  
Blank = Standard 13" reel  
E = Mini 7" reel

### Environmental Characteristics

Characteristic	Test Condition	ΔR Max.
Thermal Shock	-55 to +150 °C / 100 Cycles	0.50 %
Resistance to Soldering Heat	+260 °C / 10 Seconds	0.50 %
High Temperature Exposure	+170 °C / 100 Hours	1.00 %
Low Temperature Storage	-65 °C / 24 Hours	0.10 %
Biased Humidity Test	+85 °C, 85 %R.H., 100 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	1000 Hours Derated Curve at 130 °C	1.00 %

### Product Dimensions



Part Number	Dimension H	Dimension Y
CSS4J-4026R-L500x	$\frac{3.01 \pm 0.3}{(0.119 \pm 0.012)}$	$\frac{0.42 \pm 0.1}{(0.016 \pm 0.004)}$
CSS4J-4026R-1L00x	$\frac{2.71 \pm 0.3}{(0.107 \pm 0.012)}$	$\frac{0.42 \pm 0.1}{(0.016 \pm 0.004)}$
CSS4J-4026K-2L00x	$\frac{2.94 \pm 0.3}{(0.116 \pm 0.012)}$	$\frac{0.42 \pm 0.1}{(0.016 \pm 0.004)}$
CSS4J-4026K-5L00x	$\frac{2.62 \pm 0.3}{(0.103 \pm 0.012)}$	$\frac{0.42 \pm 0.1}{(0.016 \pm 0.004)}$

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

\*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.

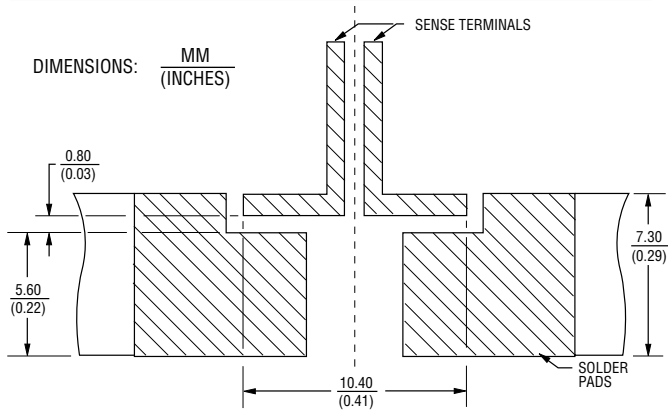
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

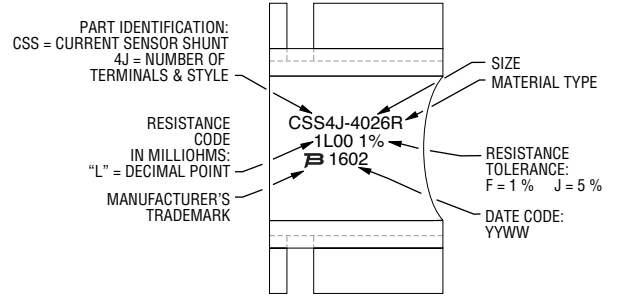
# Model CSS4J-4026 Series Current Sense Resistor



## Recommended Pad Layout

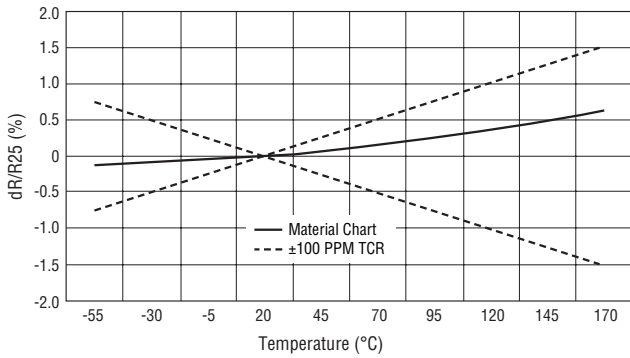


## Typical Part Marking

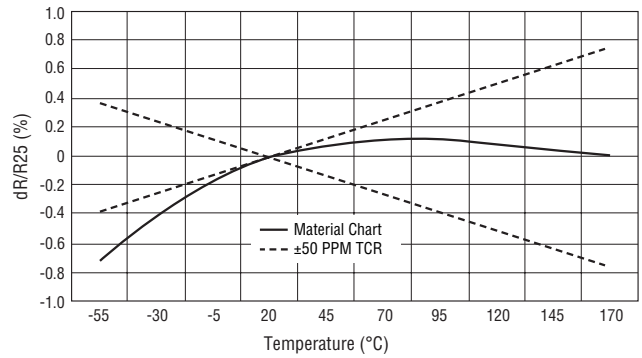


## TCR Curves

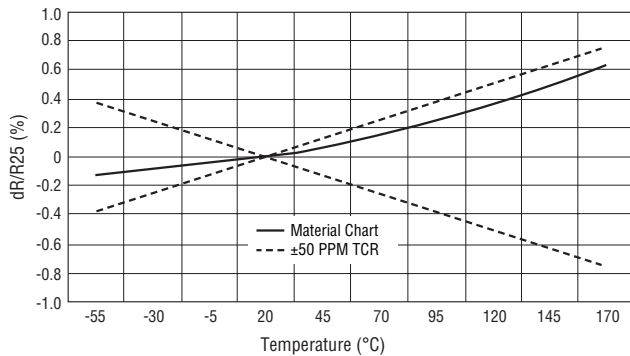
K-Type Resistive Material



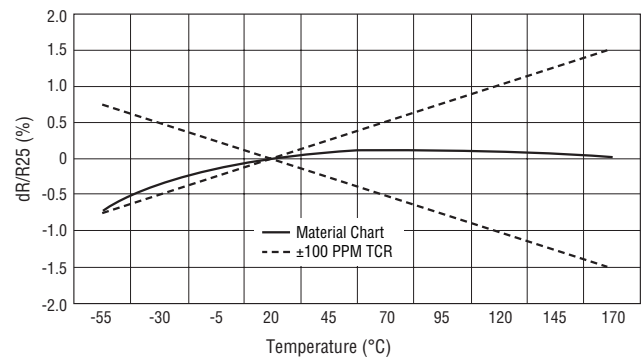
R-Type Resistive Material



K-Type Resistive Material



R-Type Resistive Material

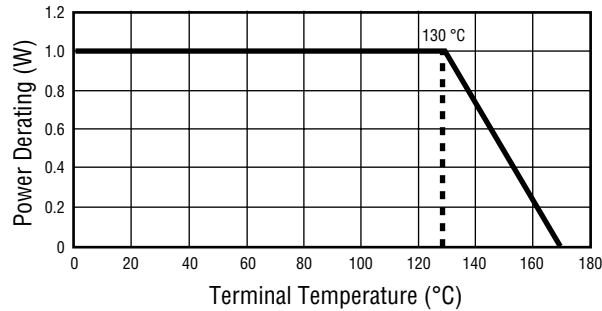


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## Power Derating Curve

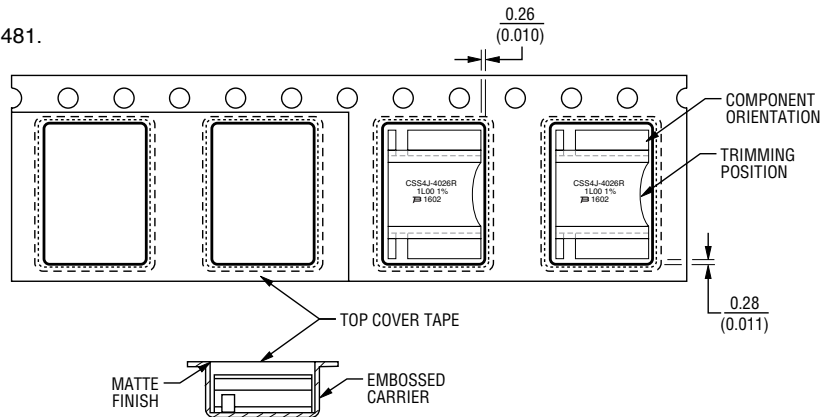


## Packaging Specifications

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](http://www.bourns.com)

REV. 08/16

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