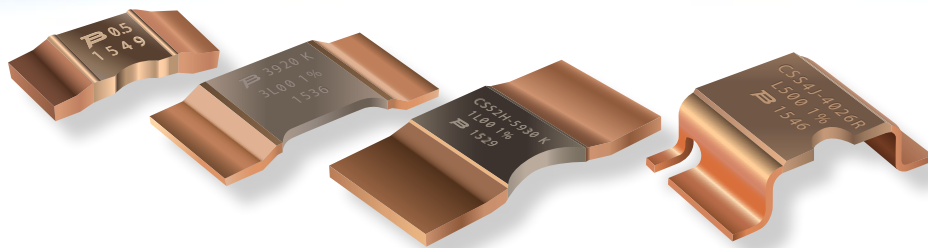


BOURNS®

Product Update Memo

CURRENT SENSE RESISTORS



Bourns® Model CSS Series Current Sense Resistor Product Updates

Riverside, California - December 15, 2016 - Bourns is announcing product updates for the Model CSS Series Current Sense Resistors. The portfolio of current sense resistors will now offer AEC-Q200 qualification for automotive applications. Also offered are additional part numbers (containing additional resistive values), new temperature coefficients of the resistors including the terminals (before, the temperature coefficient was available only on raw materials) and increased testing hours/cycle data (thermal shock, short time overload, load life, high temperature exposure, biased humidity test, board flex, solderability and ESD). Model CSS Series Current Sense Resistors have been halogen free. We have added that product characteristic to the data sheets, but there has been no change to the product materials.

Updates were made to the following data sheets. (The changes are highlighted on the following pages.)

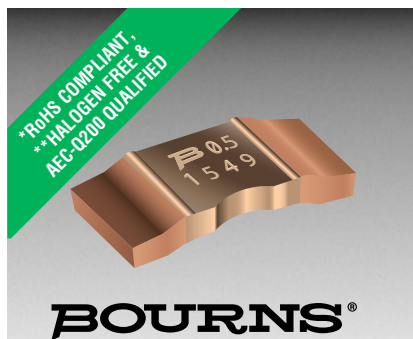
[Model CSS2H-2512](#)

[Model CSS2H-3920](#)

[Model CSS4J-4026](#)

[Model CSS2H-5930](#)

Please visit the Bourns website at www.bourns.com for additional product details. If you have any questions, please contact [Bourns Customer Service/Inside Sales](#).



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 CSS2H-2512 Series Current Sense Resistor

Electrical Characteristics

Characteristic	Model CSS2H-2512 Series	
Resistance Range / Power Rating @ 70 °C ¹ / Power Rating @ 130 °C ¹	CSS2H-2512C-0003	< 0.1 mΩ / 100 A
	CSS2H-2512R-L300x	0.3 mΩ / 6 W / 3 W
	CSS2H-2512R-L500x	0.5 mΩ / 6 W / 3 W
	CSS2H-2512R-1L00x	1.0 mΩ / 5 W / 3 W
	CSS2H-2512K-2L00x	2.0 mΩ / 5 W / 3 W
	CSS2H-2512K-3L00x	3.0 mΩ / 4 W / 2 W
	CSS2H-2512K-4L00x	4.0 mΩ / 3 W / 2 W
Operating Temperature Range	CSS2H-2512K-5L00x	5.0 mΩ / 2.5 W / 1.5 W
	-55 to +170 °C	
	±50 PPM/°C (20~60 °C)	
	CSS2H-2512R-L300x	±150 PPM/°C
	CSS2H-2512R-L500x	±100 PPM/°C
	CSS2H-2512R-1L00x	±75 PPM/°C
	CSS2H-2512K-2L00x	±75 PPM/°C
Temperature Coefficient including Copper Terminals	CSS2H-2512K-3L00x	±75 PPM/°C
	CSS2H-2512K-4L00x	±75 PPM/°C
	CSS2H-2512K-5L00x	±75 PPM/°C
	CSS2H-2512K-5L00x	±75 PPM/°C
	CSS2H-2512K-5L00x	±75 PPM/°C
	CSS2H-2512K-5L00x	±75 PPM/°C
	CSS2H-2512K-5L00x	±75 PPM/°C
Resistance Tolerance	±1 %, ±5 %	

¹ Terminal temperature

² For full TCR range, refer to TCR curve

³ Tinned copper

How to Order

CSS 2H - 2512 R - L500 J

Model

No. of Terminals
& Style

Size

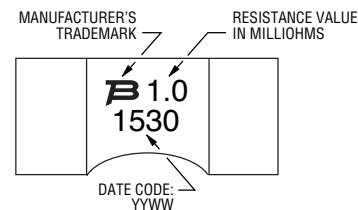
Material Type
(See Part Number Table)

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

Typical Part Marking



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.

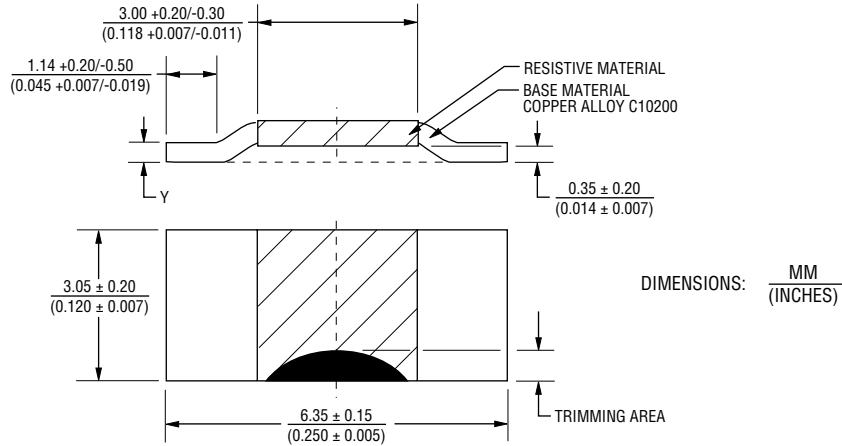
Specifications are subject to change without notice.

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 CSS2H-2512 Series Current Sense Resistor

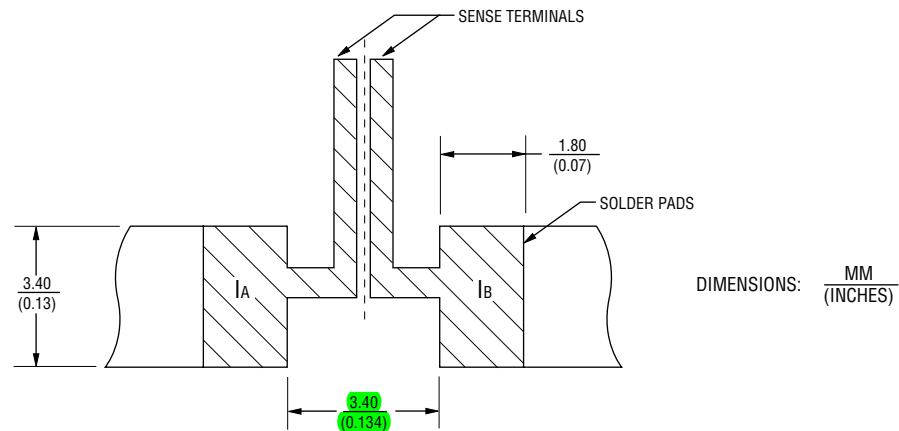
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Product Dimensions



Part Number	Dimension Y
CSS2H-2512C-000	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-2512R-L200x	1.20 ± 0.2 (0.047 ± 0.008)
CSS2H-2512R-L300x	0.84 ± 0.1 (0.033 ± 0.004)
CSS2H-2512R-L500x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-2512R-1L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-2512R-2L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-2512R-3L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-2512R-4L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-2512R-5L00x	0.42 ± 0.1 (0.016 ± 0.004)

Recommended Pad Layout

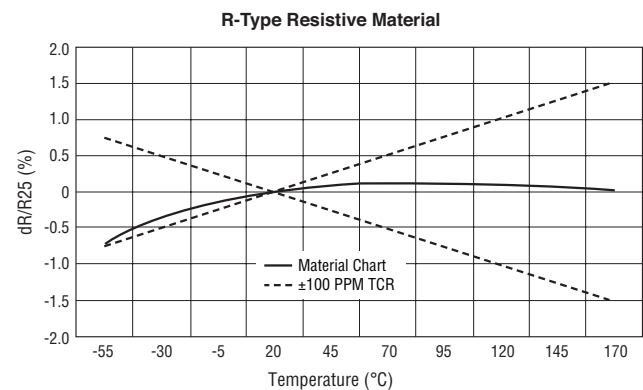
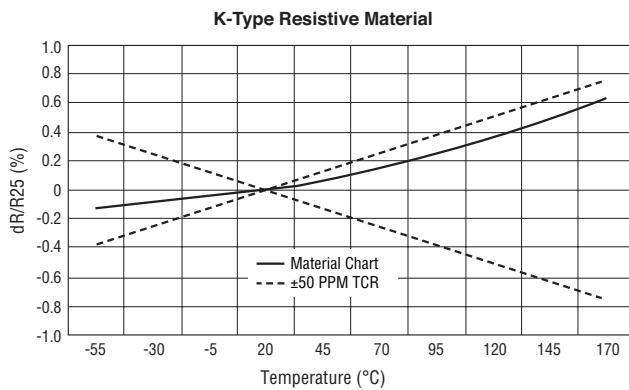
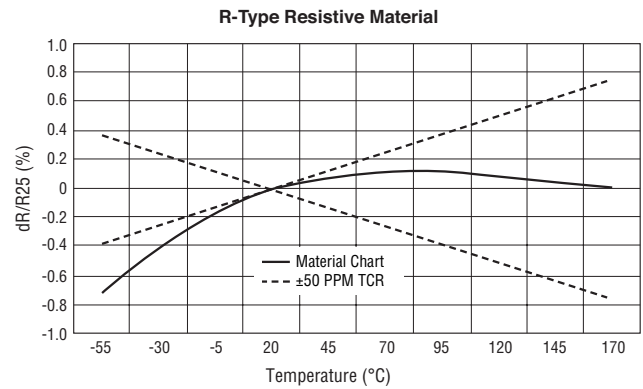
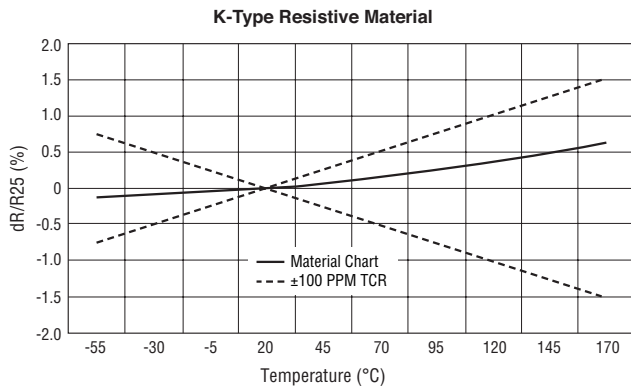


Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
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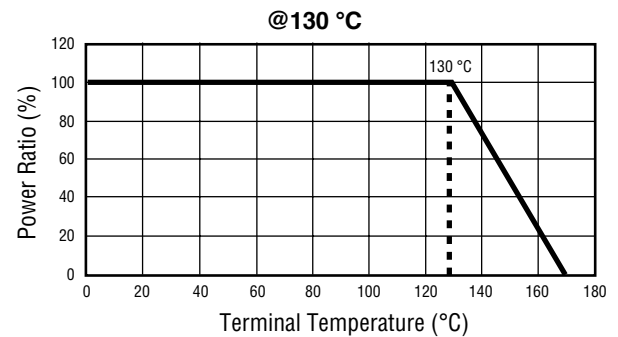
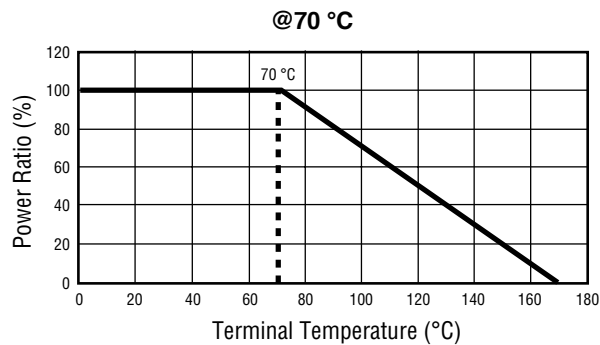
Model CSS2H-2512 Series Current Sense Resistor

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TCR Curves



Power Derating Curves



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 CSS2H-2512 Series Current Sense Resistor

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Packaging Specifications

Components packaged per EIA-481.

Standard Reel Size: 13 inches

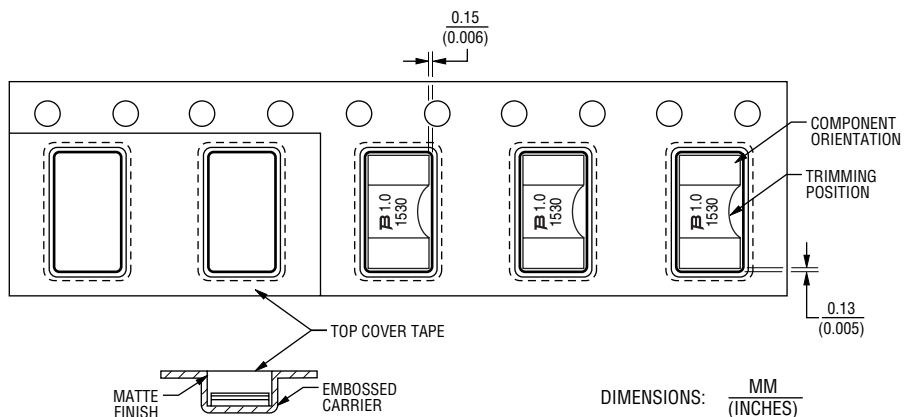
Tape Width: 12 mm

Quantity: 3,000 pcs. per reel

Mini-Reel Size: 7 inches

Tape Width: 12 mm

Quantity: 1000 pcs. per reel



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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.



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 CSS2H-3920 Series Current Sense Resistor

Electrical Characteristics

Characteristic	Model CSS2H-3920 Series	
Resistance Range / Power Rating @70 °C ¹ / Power Rating @130 °C ¹	CSS2H-3920C-000 ³	< 0.2 mΩ / 160 A
	CSS2H-3920R-L200x	0.2 mΩ / 12 W / 5 W
	CSS2H-3920R-L300x	0.3 mΩ / 10 W / 5 W
	CSS2H-3920R-L500x	0.5 mΩ / 9 W / 5 W
	CSS2H-3920R-L700x	0.7 mΩ / 8 W / 5 W
	CSS2H-3920R-1L00x	1.0 mΩ / 8 W / 5 W
	CSS2H-3920K-2L00x	2.0 mΩ / 6 W / 4 W
	CSS2H-3920K-2L50x	2.5 mΩ / 5 W / 3.5 W
	CSS2H-3920K-3L00x	3.0 mΩ / 5 W / 3 W
	CSS2H-3920K-4L00x	4.0 mΩ / 4 W / 2.5 W
	CSS2H-3920K-5L00x	5.0 mΩ / 3 W / 2 W
Operating Temperature Range	-55 to +170 °C	
TCR - Resistive Alloy ²	±50 PPM/°C (20~60 °C)	
Temperature Coefficient including Copper Terminals	CSS2H-3920R-L200x	±150 PPM/°C
	CSS2H-3920R-L300x	±150 PPM/°C
	CSS2H-3920R-L500x	±150 PPM/°C
	CSS2H-3920R-L700x	±100 PPM/°C
	CSS2H-3920R-1L00x	±100 PPM/°C
	CSS2H-3920K-2L00x	±75 PPM/°C
	CSS2H-3920K-2L50x	±75 PPM/°C
	CSS2H-3920K-3L00x	±75 PPM/°C
	CSS2H-3920K-4L00x	±75 PPM/°C
	CSS2H-3920K-5L00x	±75 PPM/°C
Resistance Tolerance	±1 %, ±5 %	

¹ Terminal temperature

² For full TCR range, refer to TCR curve

³ Tinned copper

How to Order

CSS 2H - 3920 R - 1L00 F

Model _____

No. of Terminals
& Style _____

Size _____

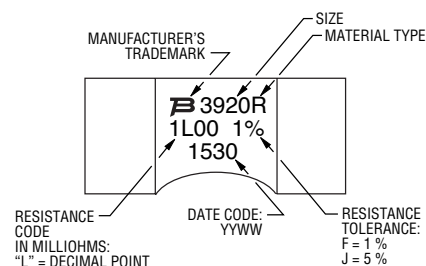
Material Type _____
(See Part Number Table)

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

Typical Part Marking



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.

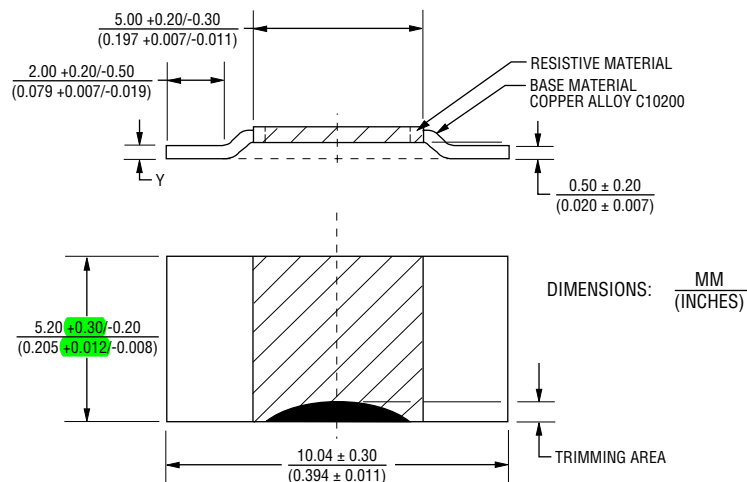
Specifications are subject to change without notice.

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 CSS2H-3920 Series Current Sense Resistor

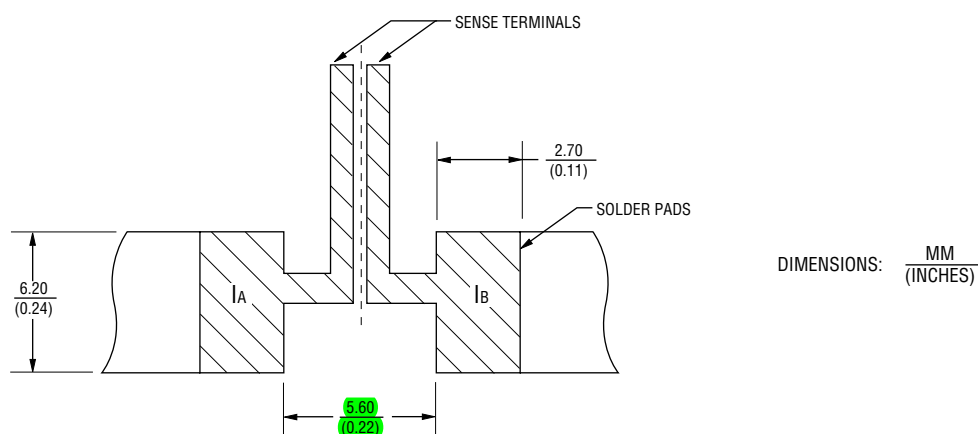
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Product Dimensions



Part Number	Dimension Y
CSS2H-3920C-000	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920R-L200x	1.20 ± 0.2 (0.047 ± 0.008)
CSS2H-3920R-L300x	0.84 ± 0.1 (0.033 ± 0.004)
CSS2H-3920R-L500x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920R-L700x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920R-1L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920K-2L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920K-2L50x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920K-3L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920K-4L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-3920K-5L00x	0.42 ± 0.1 (0.016 ± 0.004)

Recommended Pad Layout



Specifications are subject to change without notice.

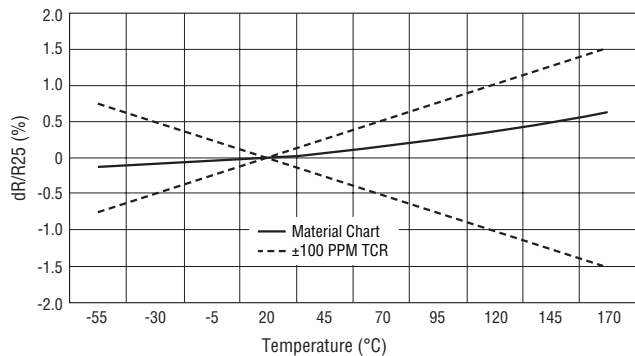
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

Model CSS2H-3920 Series Current Sense Resistor

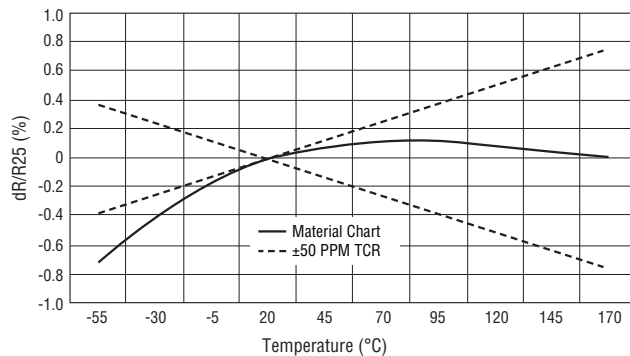
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TCR Curves

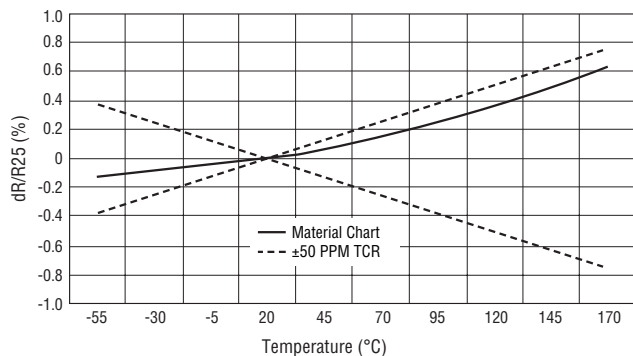
K-Type Resistive Material



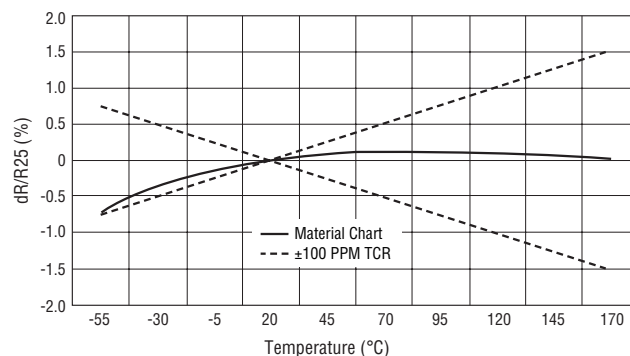
R-Type Resistive Material



K-Type Resistive Material

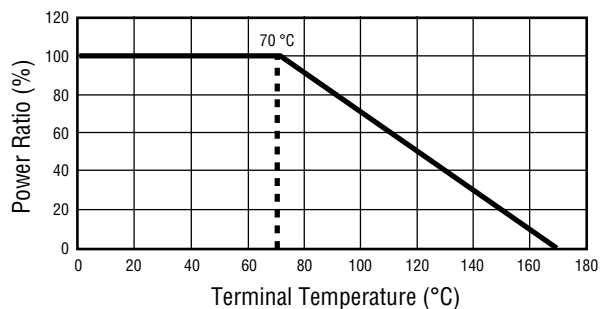


R-Type Resistive Material

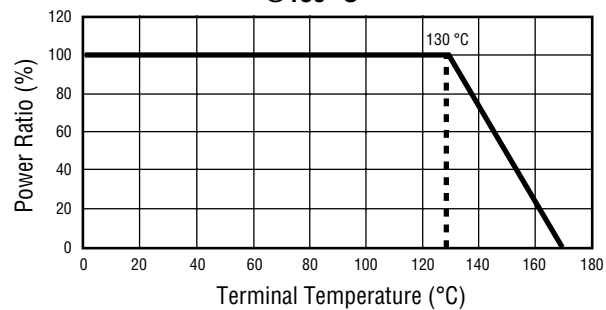


Power Derating Curves

@70 °C



@130 °C



Specifications are subject to change without notice.

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Users should verify actual device performance in their specific applications.

Model CSS2H-3920 Series Current Sense Resistor

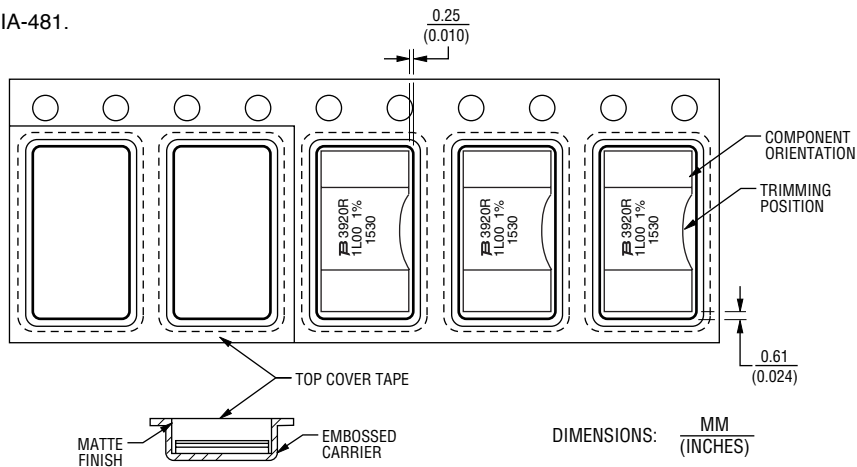
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Packaging Specifications

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

Standard Reel Size: 13 inches
Tape Width: 16 mm
Quantity: 3,000 pcs. per reel

Mini-Reel Size: 7 inches
Tape Width: 16 mm
Quantity: 1000 pcs. per reel



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Specifications are subject to change without notice.

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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	0.2 mΩ / 5 W
	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.

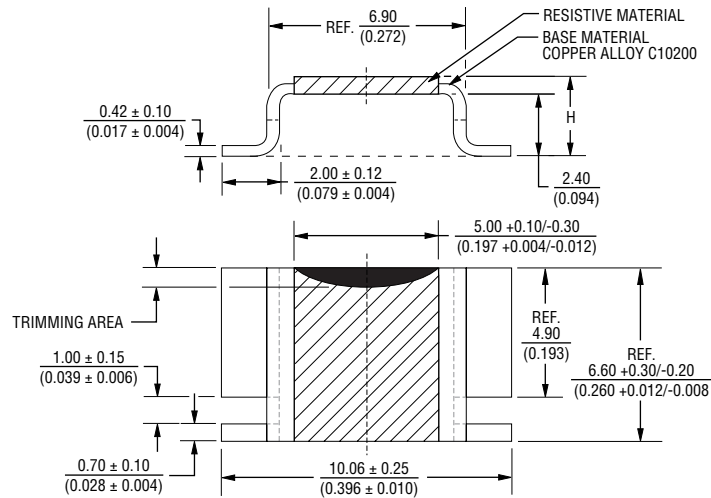
Specifications are subject to change without notice.

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

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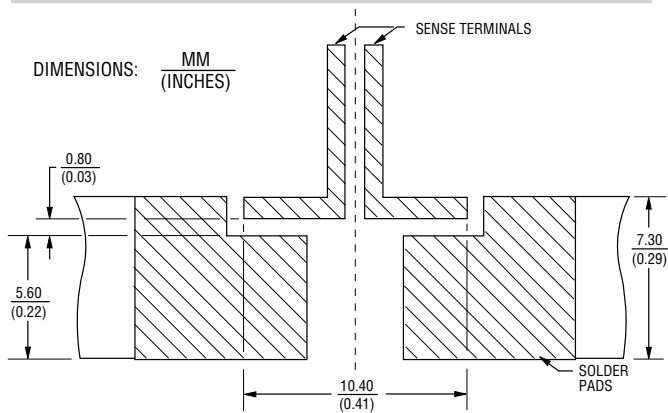
Product Dimensions



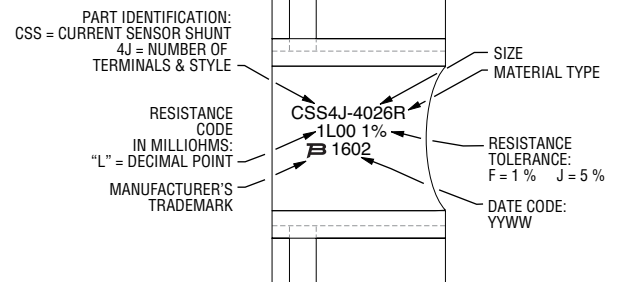
Part Number	Dimension H
CSS4J-4026R-L200x	4.01 ± 0.2 (0.161 ± 0.008)
CSS4J-4026R-L300x	3.45 ± 0.2 (0.136 ± 0.008)
CSS4J-4026R-L500x	3.04 ± 0.2 (0.120 ± 0.008)
CSS4J-4026R-1L00x	2.82 ± 0.2 (0.111 ± 0.008)
CSS4J-4026K-2L00x	2.94 ± 0.2 (0.116 ± 0.008)
CSS4J-4026K-3L00x	2.82 ± 0.2 (0.111 ± 0.008)

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

Recommended Pad Layout



Typical Part Marking



Specifications are subject to change without notice.

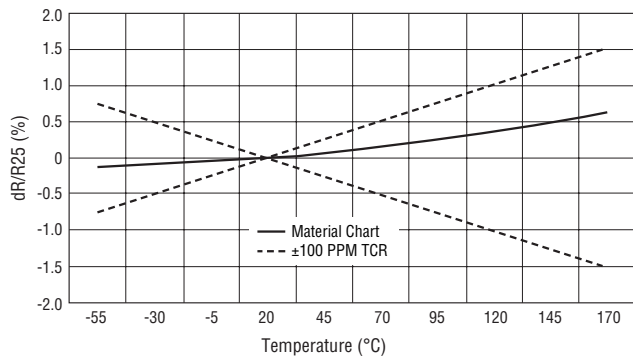
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

Model CSS4J-4026 Series Current Sense Resistor

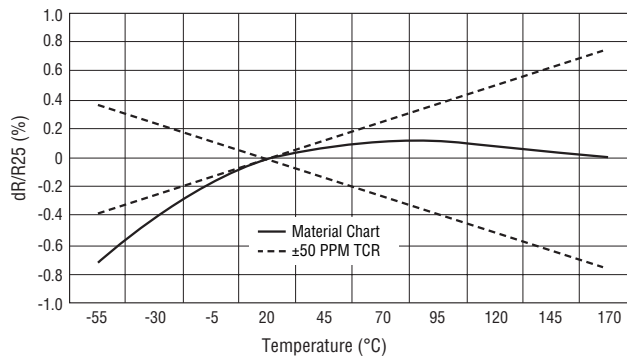
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TCR Curves

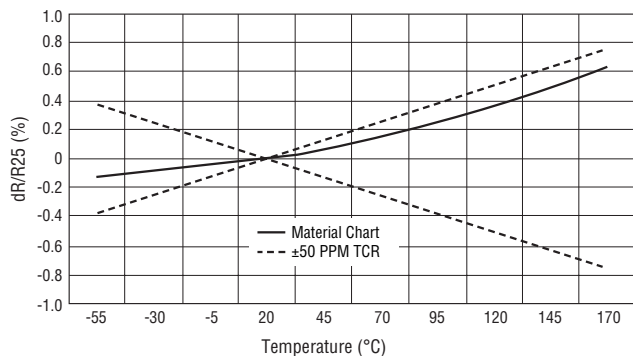
K-Type Resistive Material



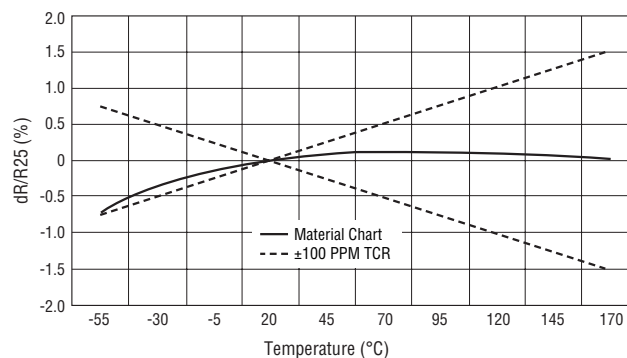
R-Type Resistive Material



K-Type Resistive Material

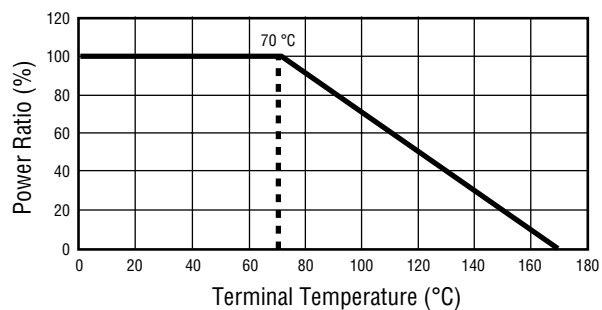


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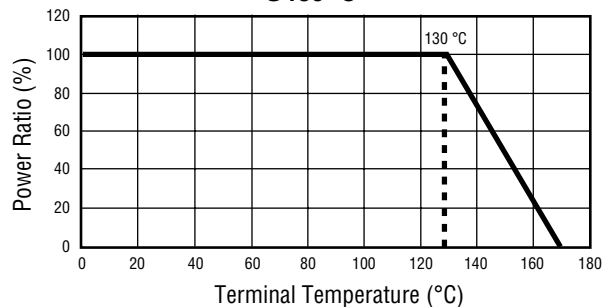


Power Derating Curves

@70 °C



@130 °C



Specifications are subject to change without notice.

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Model CSS4J-4026 Series Current Sense Resistor

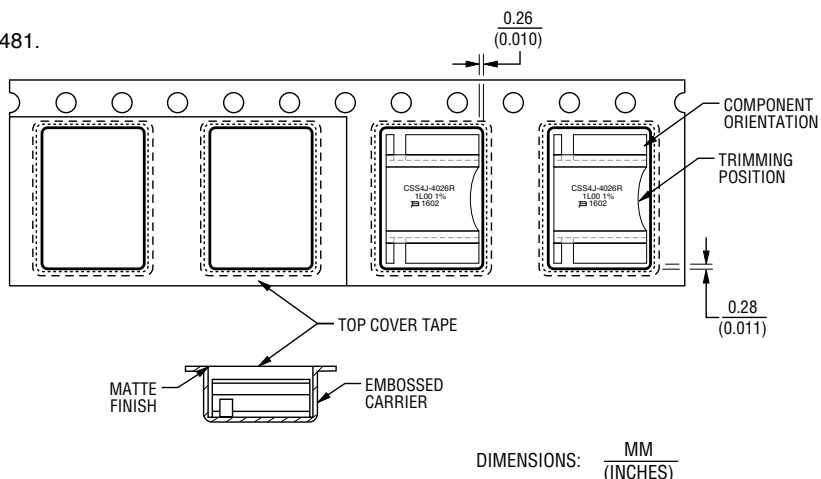
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Packaging Specifications

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



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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 CSS2H-5930 Series Current Sense Resistor

Electrical Characteristics

Characteristic	Model CSS2H-5930 Series	
Resistance Range / Power Rating @ 70 °C ¹ / Power Rating @ 130 °C ¹	CSS2H-5930C-000 ³	< 0.2 mΩ / 160 A
	CSS2H-5930R-L200x	0.2 mΩ / 15 W / 10 W
	CSS2H-5930R-L300x	0.3 mΩ / 15 W / 10 W
	CSS2H-5930R-L500x	0.5 mΩ / 8 W / 6 W
	CSS2H-5930K-1L00x	1.0 mΩ / 9 W / 6 W
	CSS2H-5930K-2L00x	2.0 mΩ / 7 W / 4 W
	CSS2H-5930K-3L00x	3.0 mΩ / 6 W / 4 W
Operating Temperature Range	-55 to +170 °C	
TCR - Resistive Alloy ²	±50 PPM/°C (20~60 °C)	
Temperature Coefficient including Copper Terminals	CSS2H-5930R-L200x	±150 PPM/°C
	CSS2H-5930R-L300x	±150 PPM/°C
	CSS2H-5930R-L500x	±100 PPM/°C
	CSS2H-5930K-1L00x	±75 PPM/°C
	CSS2H-5930K-2L00x	±75 PPM/°C
	CSS2H-5930K-3L00x	±75 PPM/°C
Resistance Tolerance	±1 %, ±5 %	

¹ Terminal temperature

² For full TCR range, refer to TCR curve

³ Tinned copper

How to Order

CSS 2H - 5930 K - 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.

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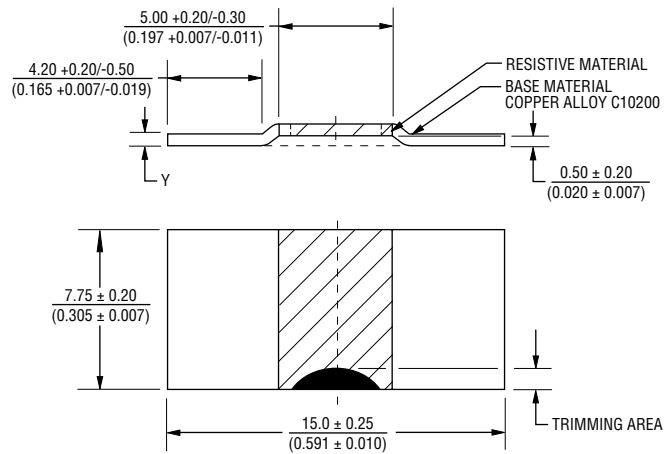
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Model CSS2H-5930 Series Current Sense Resistor

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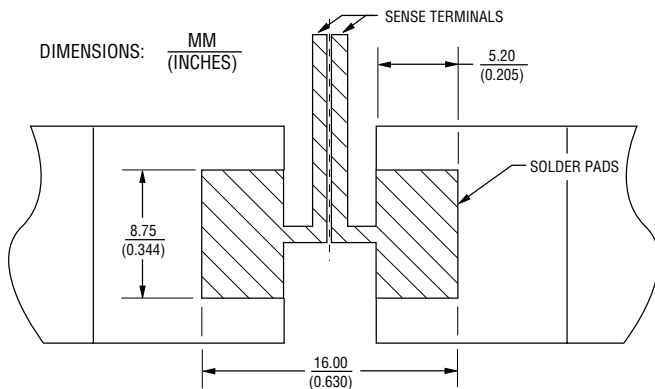
Product Dimensions



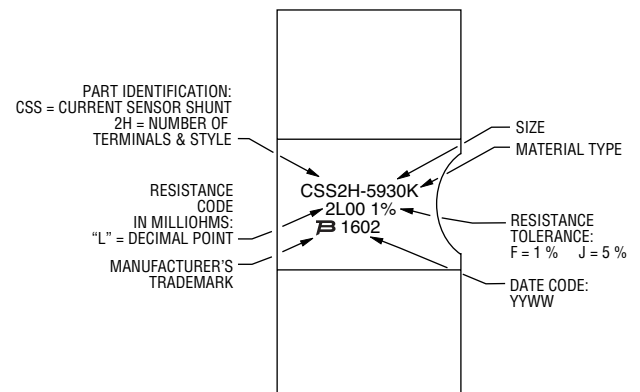
Part Number	Dimension Y
CSS2H-5930C-000	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-5930R-L200x	1.20 ± 0.2 (0.047 ± 0.008)
CSS2H-5930R-L300x	0.84 ± 0.1 (0.033 ± 0.004)
CSS2H-5930R-L500x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-5930K-1L00x	0.84 ± 0.1 (0.033 ± 0.004)
CSS2H-5930K-2L00x	0.42 ± 0.1 (0.016 ± 0.004)
CSS2H-5930K-3L00x	0.42 ± 0.1 (0.016 ± 0.004)

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

Recommended Pad Layout



Typical Part Marking



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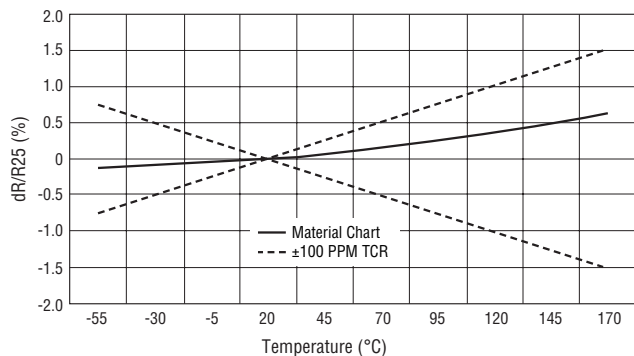
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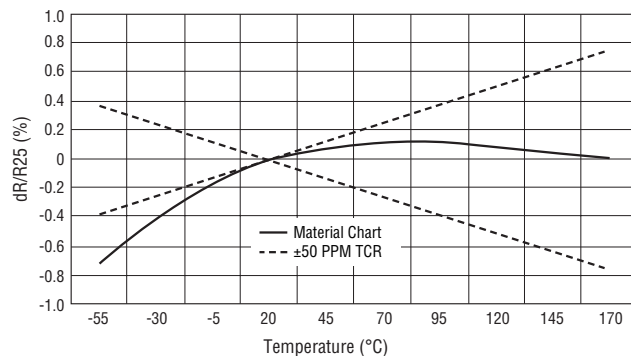
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TCR Curves

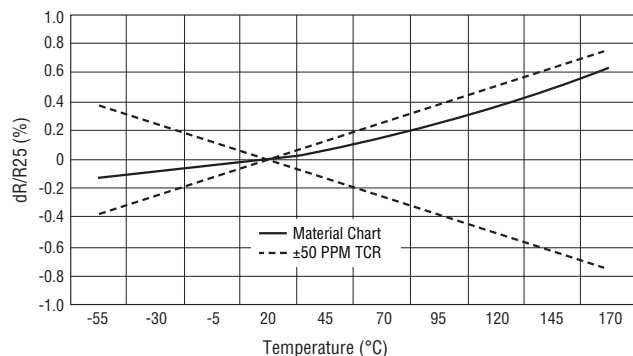
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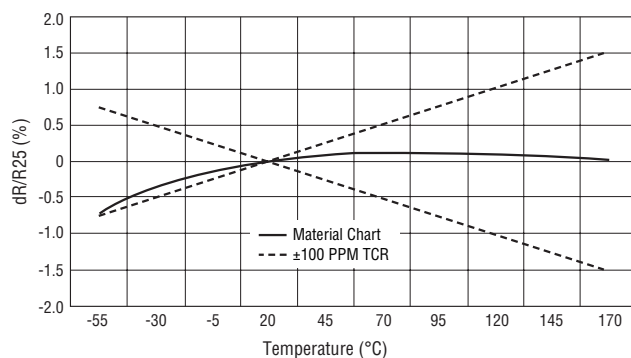
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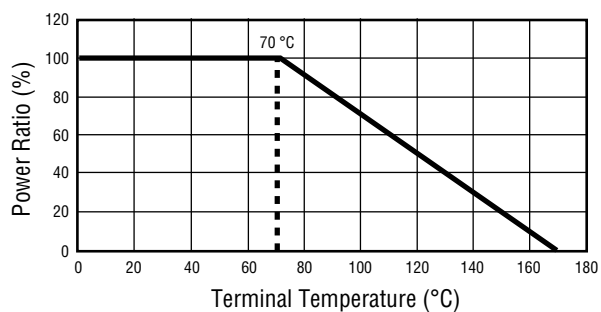


R-Type Resistive Material

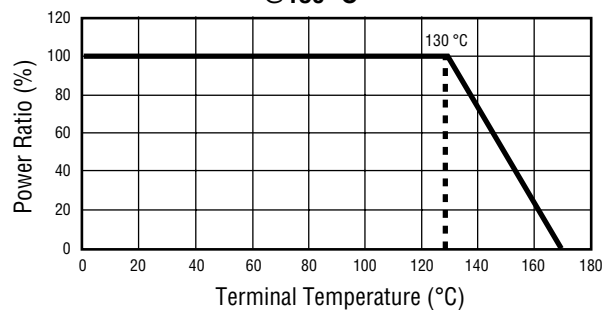


Power Derating Curves

@70 °C



@130 °C



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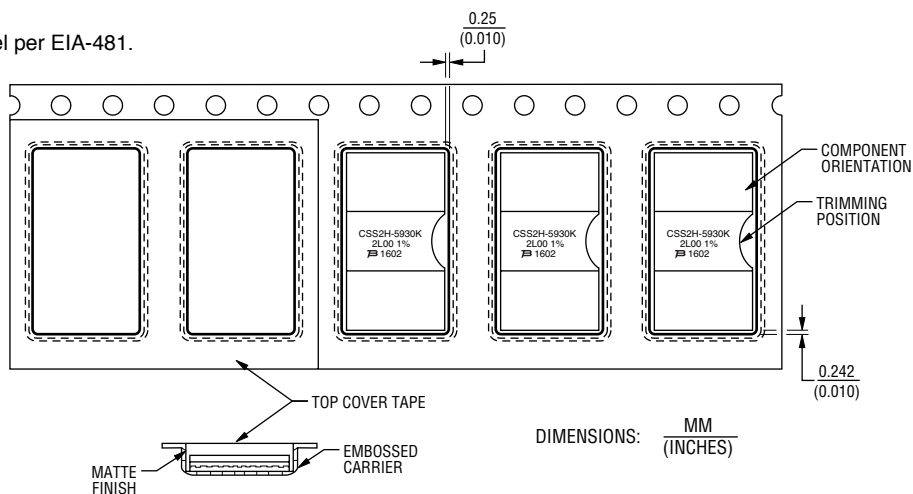
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