

### 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 CSS2H-3920 Series Current Sense Resistor

### Electrical Characteristics

Characteristic	Model CSS2H-3920 Series	
	Resistance Range / Power Rating @70 °C* / Power Rating @130 °C*	CSS2H-3920R-L200x
	CSS2H-3920R-L500x	0.5 mΩ / 9 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-3L00x	3.0 mΩ / 5 W / 3 W
Operating Temperature Range	-55 to +170 °C	
TCR - Resistive Alloy	≤+50 PPM/°C (20~60 °C)	
Resistance Tolerance	±1 %, ±5 %	

\* Terminal temperature

### 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 %

### How to Order

Model **CSS 2H - 3920 R - 1L00 F**

No. of Terminals & Style \_\_\_\_\_

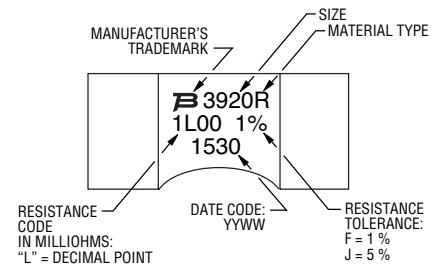
Size \_\_\_\_\_

Material Type \_\_\_\_\_  
(See Part Number Table)

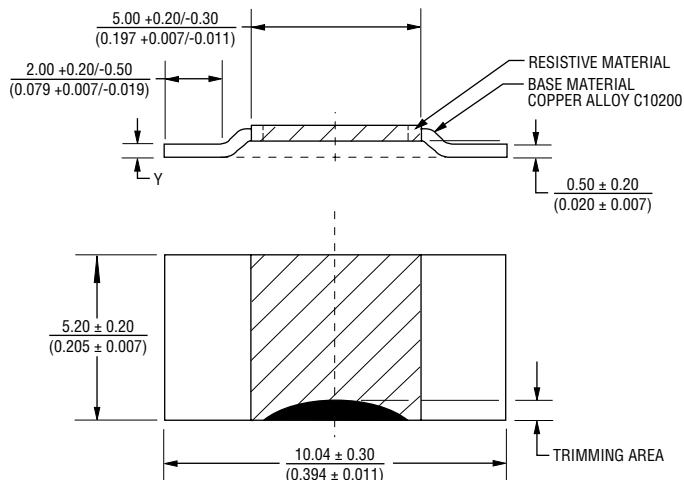
Resistance Code (milliohms) \_\_\_\_\_  
"L" represents decimal point  
(examples: L500 = .500 milliohms; 1L00 = 1.00 milliohms)

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

### Typical Part Marking



### Product Dimensions



Part Number	Dimension Y
CSS2H-3920R-L200x	$\frac{1.20 \pm 0.1}{(0.047 \pm 0.004)}$
CSS2H-3920R-L500x	$\frac{0.84 \pm 0.1}{(0.033 \pm 0.004)}$
CSS2H-3920R-1L00x	$\frac{0.42 \pm 0.1}{(0.016 \pm 0.004)}$
CSS2H-3920K-2L00x	
CSS2H-3920K-3L00x	

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.

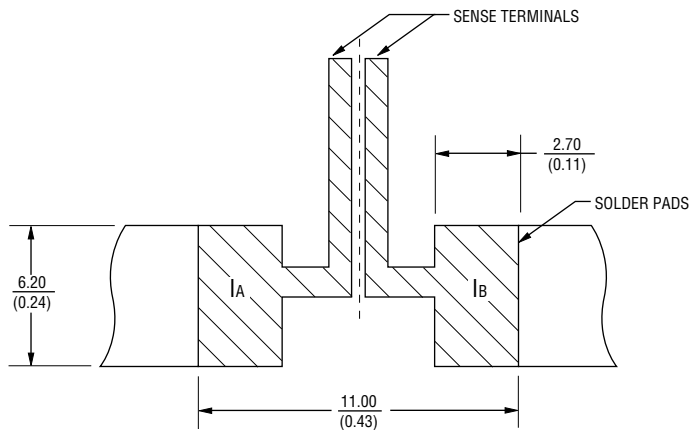
Specifications are subject to change without notice.

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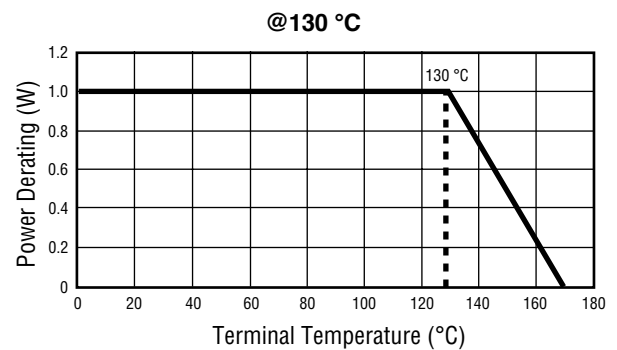
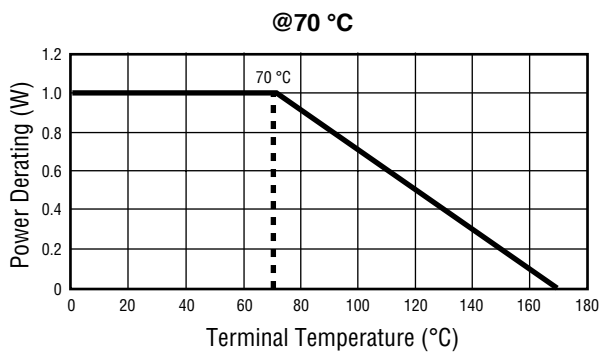
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## Recommended Pad Layout



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

## Power Derating Curves



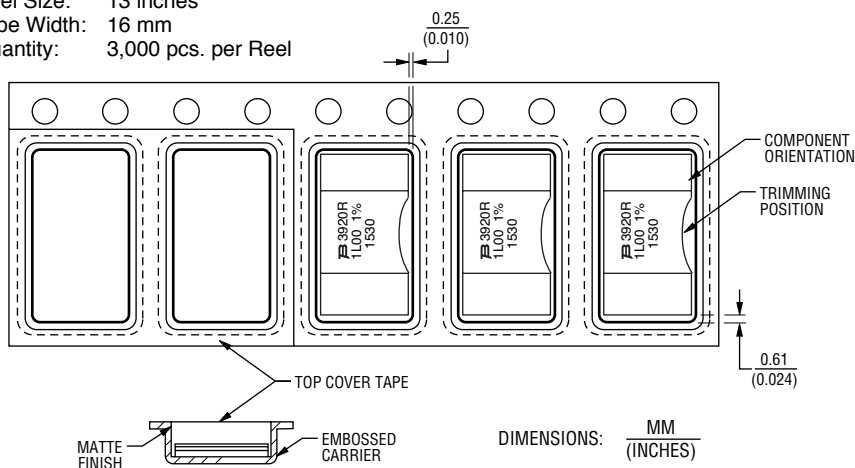
## Packaging Specifications

Components packaged per EIA-481.

Reel Size: 13 inches

Tape Width: 16 mm

Quantity: 3,000 pcs. per Reel



**BOURNS®**

### Asia-Pacific:

Tel: +886-2 2562-4117

Email: asiacus@bourns.com

### Europe:

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)

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