## **Resistors**



# **Four Terminal Open Air Low Ohm Current Sense Resistor**

### **CSL Series - Patent Pending**

- <55 ppm/°C TCR</p>
- 5 watt max power
- 55 amp max current
- Down to 1% tolerance
- 4-Terminal Kelvin connections



All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

### **FEATURES:**

- Inductance less than 10 nanohenries
- Flameproof
- Solderable leads
- · 55 amp continuous operating current
- · Inline construction for easy board insertion
- · Economical board space design
- Welded construction

### **APPLICATIONS:**

- Current Sensing
- · Feed Back
- Motor Control
- · Surge/Pulse Applications

## **Electrical Data**

IRC Type Power/Current Rating (Watts)		Standard Resistance Values $(m\Omega)$	Tolerance (±%)	
CSL 5 watt max power 55 amps max current		0.25, 0.5, 1, 1.5, 2, 2.5	1%	

## **Environmental Data**

CSL Performance Characteristics: Test Spec: AEC Q200				
TCR +125 to -55°C	<55 ppm/°C			
Thermal Shock	<1.5%			
High Temp Exposure 1000 hours @ 125°C	<1.75%			
Temp. Cycling: -55 to 125°C 1000 cycles	<1.0%			
Operational Life: 1000 hours @ 70°C	<1.0%			
Moisture Resistance	<1.0%			
Baised Humidity	<1.0%			
Mechanical Shock	<1.0%			
Vibration	<0.75%			
Solder Heating	<1.0%			
Solderability	Meets J-STD-002 Method A			

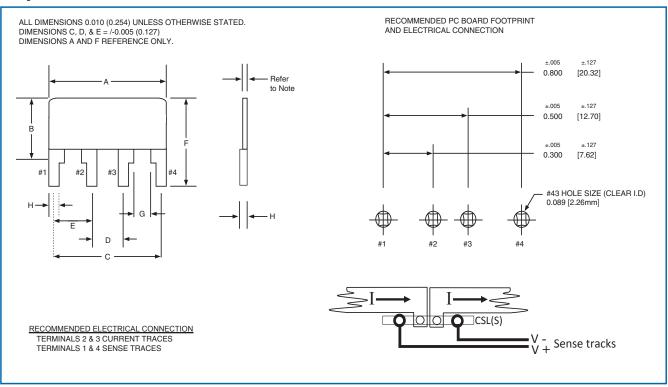
BI Technologies IRC Welwyn

# Four Terminal Open Air Low Ohm Current Sense Resistor

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## Physical Data



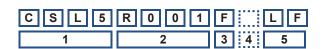
### Note:

 $\begin{array}{l} 1.1 \ m\Omega - 2.5 \ m\Omega = 0.014 \ [0.356] \\ 0.4 \ m\Omega - 1.0 \ m\Omega = 0.036 \ [0.914] \\ 0.25 \ m\Omega - 0.4 \ m\Omega = 0.071 \ [1.80] \end{array}$ 

Dimensions (Inches (mm))								
Α	В	С	D	E	F	G	Н	
0.862 (21.9)	0.426 (10.8)	0.800 (20.3)	0.200 (5.1)	0.300 (7.6)	0.555 (14.01)	0.176 (4.5)	0.062 (1.57)	

## **Ordering Data**

Example: CSL5-R001FLF (CSL5, 1 milliohm ±1%, marked, Pb-free)



1	2	3	4			5
Туре	Value	Tolerance	Marking			Termination
CSL5	4-6 characters	F = ±1%	Omit	Marked	Standard	LF = Pb-free
	See Electrical Data		U	Unmarked	Non-standard	
	R = ohms				•	•

### General Note

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Current Sense Resistors - Through Hole category:

Click to view products by TT Electronics manufacturer:

Other Similar products are found below:

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SR10-0.015-1% SR20-0.008-1% HPCR0402F12K0K9 HPCR0402F130RK9 HPCR0402F13K0K9 HPCR0402F17K4K9

HPCR0402F180KK9 HPCR0402F180RK9 HPCR0402F1K10K9 HPCR0402F220KK9 HPCR0402F220RK9 HPCR0402F24K0K9

HPCR0402F27K0K9 HPCR0402F2K00K9 HPCR0402F33K0K9 HPCR0402F430KK9 HPCR0402F4K30K9 HPCR0402F680KK9

HPCR0402F680RK9 HPCR0402F390KK9 HPCR0402F39K0K9 HPCR0402F38K20K9 HPCR0402F560RK9 HPCR0402F2K70K9

HPCR0402F360KK9 HPCR0402F36K0K9 HPCR0402F3K00K9 HPCR0402F3K90K9 HPCR0402F430RK9 HPCR0402F4X0K9

HPCR0402F475KK9 HPCR0402F47K0K9 HPCR0402F51K0K9 HPCR0402F560KK9 HPCR0402F56K0K9 HPCR0402F5K10K9

HPCR0402F5K60K9 HPCR0402F620KK9 HPCR0402F620RK9 HPCR0402F68K0K9 HPCR0402F6K20K9 HPCR0402F6K80K9

HPCR0402F750KK9 HPCR0402F750RK9 HPCR0402F7K50K9 HPCR0402F820KK9 HPCR0402F82K0K9 HPCR0402F910KK9

HPCR0402F910RK9 HPCR0402F91K0K9
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