Four Terminal Open Air Low Ohm Current Sense Resistor



CSL Series

Features

- <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 (mΩ)	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				

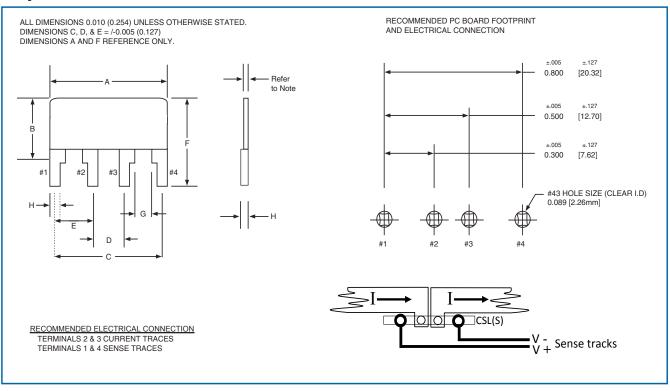
BI Technologies IRC Welwyn

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Physical Data



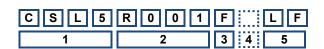
Note:

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

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
Type	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

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