

Four Terminal Open Air Low Ohm Current Sense Resistor

NOT RECOMMENDED FOR NEW DESIGNS

CSL Series

Features

- <55 ppm/°C TCR
- 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

General Note

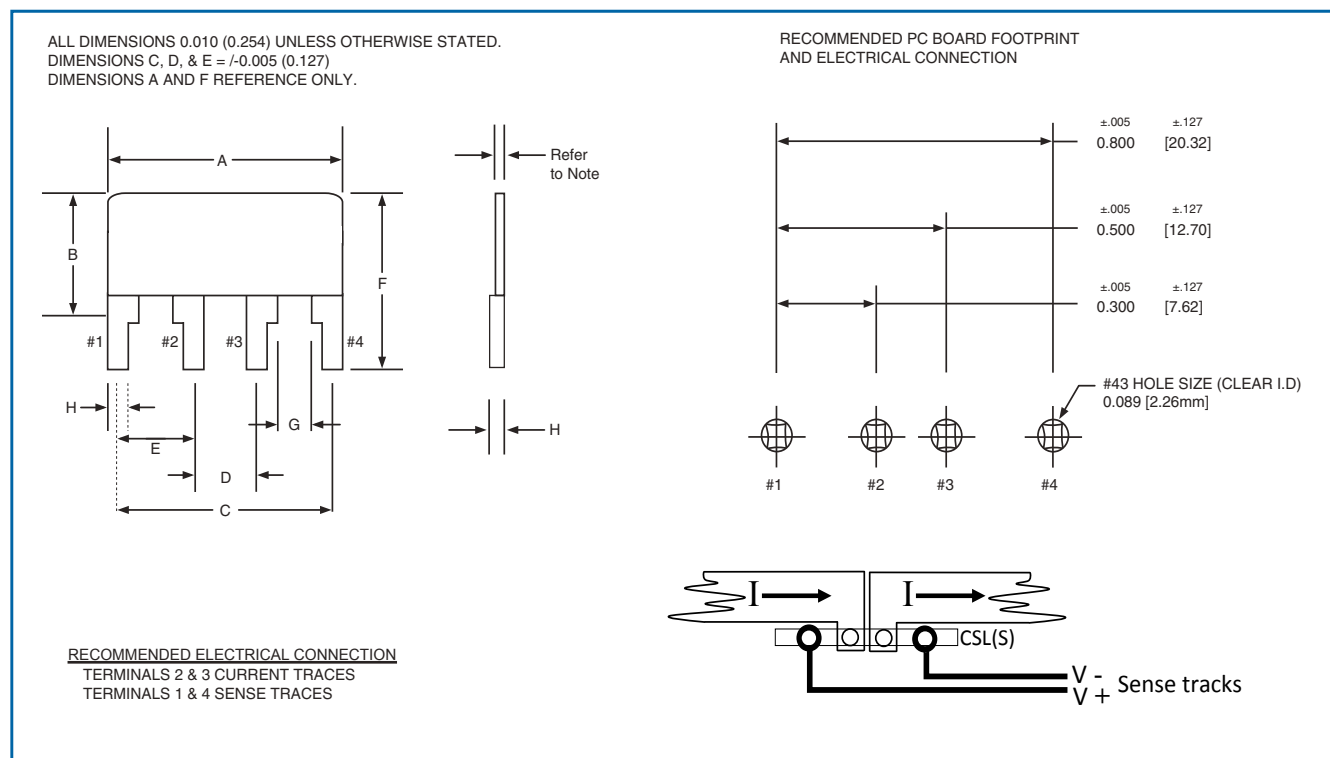
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BI Technologies IRC Welwyn

www.ttelectronics.com/resistors

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Physical Data



Note:

1.1 mΩ - 2.5 mΩ = 0.014 [0.356]

0.4 mΩ - 1.0 mΩ = 0.036 [0.914]

0.25 mΩ - 0.4 mΩ = 0.071 [1.80]

Dimensions (Inches (mm))							
A	B	C	D	E	F	G	H
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 $\pm 1\%$, marked, Pb-free)

C	S	L	5	R	0	0	1	F		L	F
1			2			3	4	5			

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

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Mouser Electronics

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