



NEW PRODUCT BRIEF

Riedon™ Model SSA-2 Series Current Sensor - Analog by Bourns

INTRODUCTION

The Riedon™ Model SSA-2 Series Current Sensor - Analog by Bourns offers a high accuracy current sensing solution with greater operational stability compared to typical Hall Effect sensors. Bourns designed this series to give designers a high quality device that delivers immunity to stray magnetic fields. This capability is important as stray magnetic fields can interfere with the operation of sensors in sensitive electronic devices, which could potentially cause inaccurate readings, device failure or even safety hazards. In addition, the Model SSA-2 Current Sensor - Analog Series meets unipolar power supply requirements, making these devices superior measurement choices for a wide variety of battery-related current sensing applications.

FEATURES

- 100 A to 1000 A
- AC or DC circuits
- 1500 VDC Reinforced Isolation
- $\pm 0.2\%$ Tolerance
- Amplified Differential Output, ± 2.5 V peak
- RoHS compliant*

HOW TO ORDER

Model SSA-2 - 100A
 Nominal Current 100A = 100 A
 250A = 250 A
 500A = 500 A
 1000A = 1000 A

BENEFITS

- High Quality, High Accuracy
- Effective Immunity to Stray Magnetic Fields
- Meets Unipolar Power Supply Requirements

TYPICAL APPLICATIONS

- Battery systems
- Renewable energy
- Motor drives
- EV charging stations

ELECTRICAL CHARACTERISTICS

Series	Nominal Current (A)	Over Current (1 s, dipped)	Power Supply (3.0 to 5.5 VDC) with high impedance load	TCR (25 °C - 95 °C)	Bandwidth (electronics)	Signal to Noise Ratio (SNR)	Operating Temperature
SSA-2-100A	100	600 A	@ 3.0 V, 20 mA typical	± 30 PPM/°C	300 kHz	VIN = 100 mVPP, fIN = 1 kHz, BW = 10 kHz 80 dB min., 84 dB typical	-40 °C to +115 °C ambient
SSA-2-250A	250	1500 A					-40 °C to +125 °C primary conductor (see derating curve on page 4 of data sheet)
SSA-2-500A	500	3000 A	@ 5.5 V, 40 mA typical			VIN = 100 mVPP, fIN = 10 kHz, BW = 100 kHz 70 dB typical	
SSA-2-1000A	1000	6000 A					

For full characteristics, see data sheet

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

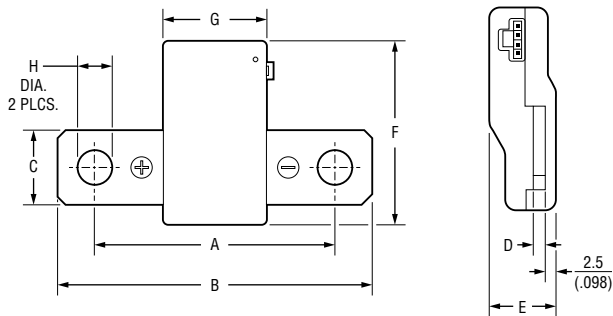
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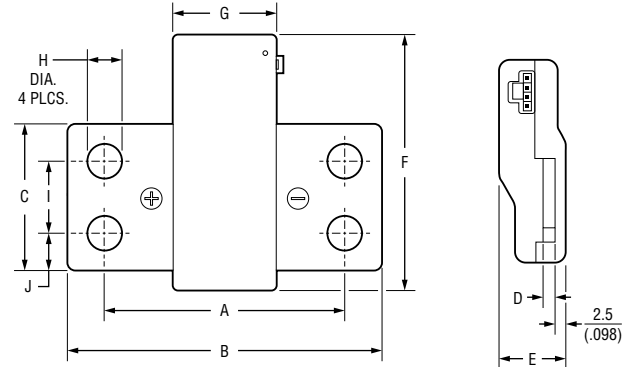


PRODUCT DIMENSIONS

SSA-2-100A to SSA-2-500A



SSA-2-1000A



Product Dimensions

Model	SSA-2-100A	SSA-2-250A	SSA-2-500A	SSA-2-1000A
A	$\frac{63.5 \pm 0.5}{(2.50 \pm .020)}$			
B	$\frac{84 \pm 0.5}{(3.307 \pm .020)}$			
C	$\frac{20 \pm 0.5}{(.787 \pm .020)}$			$\frac{40 \pm 0.5}{(1.575 \pm .020)}$
D	$\frac{3 \pm 0.5}{(.118 \pm .020)}$		$\frac{4 \pm 0.5}{(.157 \pm .020)}$	
E	$\frac{16.4 \pm 0.5}{(.646 \pm .020)}$		$\frac{17.4 \pm 0.5}{(.685 \pm .020)}$	
F	$\frac{48.7 \pm 0.5}{(1.917 \pm .020)}$			$\frac{68.7 \pm 0.5}{(2.705 \pm .020)}$

Model	SSA-2-100A	SSA-2-250A	SSA-2-500A	SSA-2-1000A
G	$\frac{28 \pm 0.5}{(1.102 \pm .020)}$			
H	$\frac{8.7 \pm 0.5}{(.343 \pm .020)}$			
I	—	—	—	$\frac{19 \pm 0.5}{(.748 \pm .020)}$
J	—	—	—	$\frac{10.5 \pm 0.5}{(.413 \pm .020)}$
Mass (g)	67	69	84	145

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

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