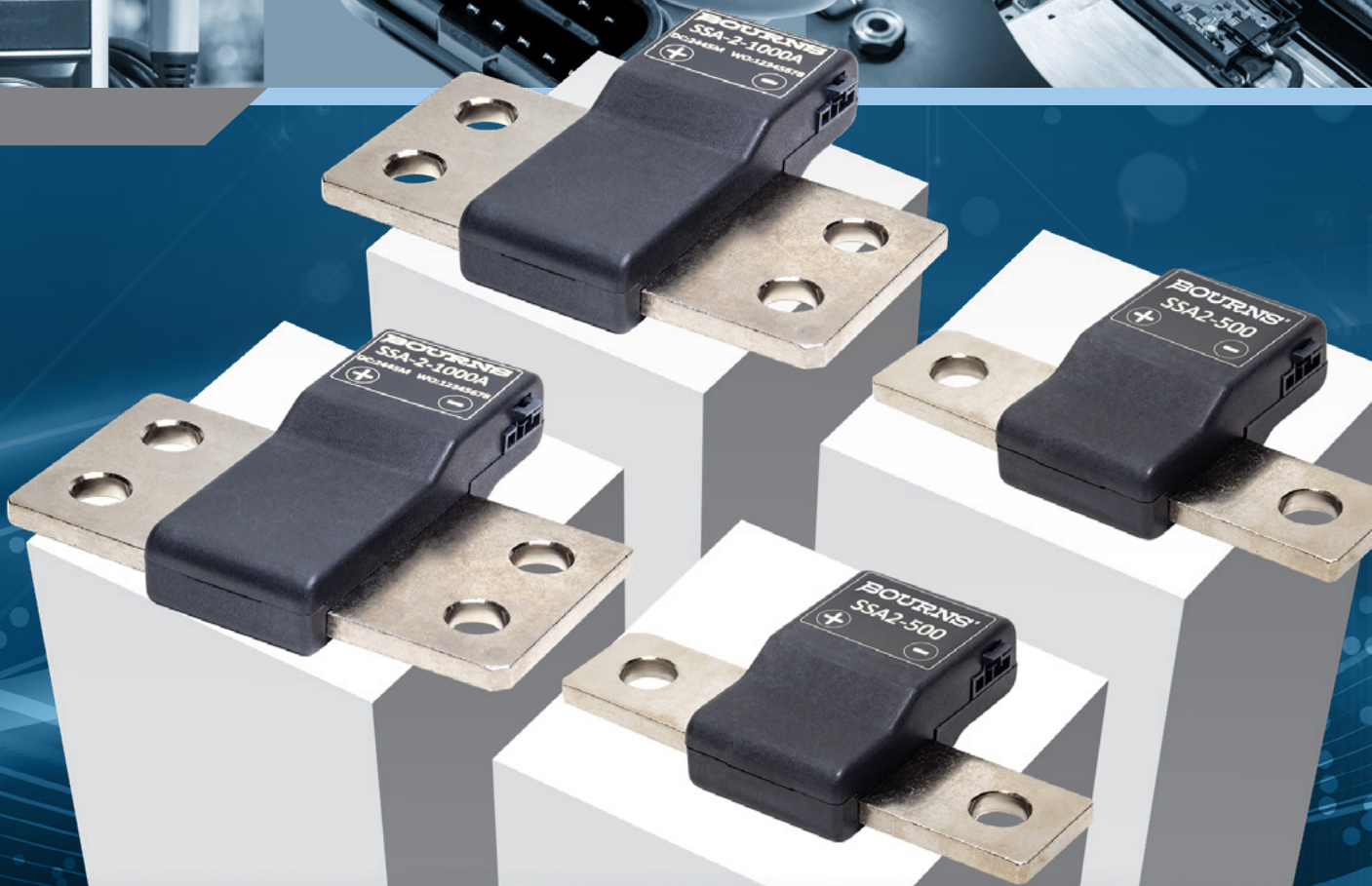


Riedon™ SSA-2 Series Analog Current Sensor by Bourns



BOURNS®

Introduction

RIEDON™ SSA-2 SERIES ANALOG CURRENT SENSORS

The Riedon™ SSA-2 Series Analog Current Sensor by Bourns is a small, light model with a resilient connector for enhanced performance. This connector enables higher operating temperatures of up to +115 °C, making it ideal for certain environments that demand reliability and stability. Additionally, the SSA-2 Series offers a user-friendly connector location for easy installation. This design includes high vibration resistance, making it an excellent choice for a highly stressed environment.

The robustness of SSA-2 Series smart current modules makes them suitable for use in high-power (100 A to 1000 A) implementations. Key examples include AC/DC converters, uninterruptible power supplies, renewable energy generation sites, and smart grid infrastructure.

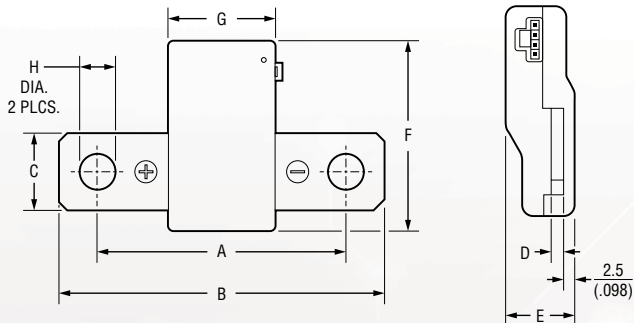
The -40 °C to +115 °C (ambient) operating temperature range allows these devices to be used in harsher environments than other current sensing products.

The SSA-2 Series is RoHS compliant in accordance with Electrical and Electronic Equipment Directive, 2011/65/EU (commonly called "RoHS2") and amendment of Annex II on March 31, 2015, 2015/863.

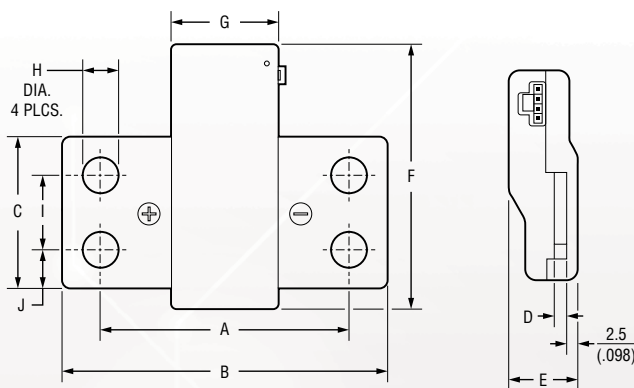
This model is produced and assembled utilizing state-of-the-art production equipment along with lean manufacturing principles to provide our customers with a high-performance product at a competitive price.

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	63.5 ± 0.5 ($2.50 \pm .020$)			
B	84 ± 0.5 ($3.307 \pm .020$)			
C	20 ± 0.5 ($.787 \pm .020$)			40 ± 0.5 ($1.575 \pm .020$)
D	3 ± 0.5 ($.118 \pm .020$)		4 ± 0.5 ($.157 \pm .020$)	
E	16.4 ± 0.5 ($.646 \pm .020$)		17.4 ± 0.5 ($.685 \pm .020$)	
F	48.7 ± 0.5 ($1.917 \pm .020$)			68.7 ± 0.5 ($2.705 \pm .020$)

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

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

Product Portfolio

WHAT IS AN ANALOG CURRENT SENSOR?

The New Riedon™ SSA-2 Series Analog Current Sensor by Bourns consists of a high-quality device with immunity to stray magnetic fields with a unipolar power supply requirement that can be used in a wide variety of battery related current sensing applications.

The SSA-2 Series is a current sensing solution with both considerably lower insertion resistance than passive shunt sensors and greater accuracy and operational stability than Hall Effect sensors.







SSA-2 SERIES FEATURES AND BENEFITS

- 100 A to 1000 A nominal current
- AC or DC circuits
- 500 VDC reinforced isolation
- Amplified differential output, ± 2.5 V peak
- ± 0.2 % Tolerance
- Immunity to stray magnetic fields

APPLICATIONS

- CANbus
- RS-485
- Battery systems
- Renewable energy
- Motor drives
- EV charging stations

PRODUCT CHARACTERISTICS

Series	Photo	Package Size	Response Time	Normal Current (A)	Linearity	Initial Accuracy	Bandwidth	Output	Operating Temperature	Storage Temperature	Polarization	Supply Voltage	RoHS Compliant
SSA-2-100A		110 mm	1.6 μ s	± 100	± 0.1 %	± 0.2 %	300 kHz	Analog	-40 °C to +115 °C	-55 °C to +125 °C	Bidirectional	3 V	Yes
SSA-2-250A		110 mm	1.6 μ s	± 250	± 0.1 %	± 0.2 %	300 kHz	Analog	-40 °C to +115 °C	-55 °C to +125 °C	Bidirectional	3 V	Yes
SSA-2-500A		110 mm	1.6 μ s	± 500	± 0.1 %	± 0.2 %	300 kHz	Analog	-40 °C to +115 °C	-55 °C to +125 °C	Bidirectional	5.5 V	Yes
SSA-2-1000A		110 mm	1.6 μ s	± 1000	± 0.1 %	± 0.2 %	300 kHz	Analog	-40 °C to +115 °C	-55 °C to +125 °C	Bidirectional	5.5 V	Yes

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In April 2023, BE Services Company, Inc., a subsidiary of Bourns, Inc., purchased certain assets of Riedon, Inc., including its logo and trademarks and the right to continue to manufacture former Riedon™ products.

The "Riedon Logo" is a registered trademark of BE Services Company, Inc. in the United States. "Riedon" is a trademark of BE Services Company, Inc.