



NEW PRODUCT BRIEF

Riedon™ Model SSD Series Current Sensors - Digital by Bourns

INTRODUCTION

The Riedon™ Model SSD Series Current Sensors - Digital by Bourns gives designers a highly integrated, high precision, compact and cost-effective current measurement solution. This advanced System-in-Package (SIP) device delivers calibrated and temperature-compensated digital output that is ideal for current sensing in a wide variety of battery-related applications. With considerably lower insertion resistance than passive current sensors, this series also offers greater accuracy and operational stability than typical Hall Effect sensors.

FEATURES

- 16-bit +150 °C Microcontroller
- 24-bit ADC with Buffered Analog Inputs
- ECC Flash Memory with Autocorrect Single Bit Errors
- Internal and External CRC Data Error Detection
- Advanced Non-Linear Temperature Compensation

HOW TO ORDER

Model _____ **SSD - 100A - x**

Nominal Current _____

100A = 100 A

500A = 500 A

Interface _____

C = CANbus

R = RS-485, MODBUS



BENEFITS

- Smaller Package – Bigger Performance
- High Accuracy Solution with Digital Output
- Enhanced Operational Stability
- 100 A and 500 A Nominal Current
- 1500 VDC Galvanic Isolation
- ±0.1 % Tolerance
- Available with CANbus or RS-485 Output



TYPICAL APPLICATIONS

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

MODEL SSD SERIES WITH CANbus INTERFACE

Series	Photo	Package Size	Technology	Normal Current (A)	Current Resistance (Microohms)	Initial Accuracy	Bandwidth	ADC Resolution	Operating Temperature	Storage Temperature	Speed	Supply Voltage
SSD-100A-C		110 mm	CANbus	± 100	300	± 0.1 %	5 kHz	24 bits	-40 °C to +115 °C	-55 °C to +125 °C	Up to 1100 RPS	5.0V, 55 mA Typical
SSD-500A-C		110 mm	CANbus	± 500	60	± 0.1 %	5 kHz	24 bits	-40 °C to +115 °C	-55 °C to +125 °C	Up to 1100 RPS	24V, 15 mA Typical

MODEL SSD SERIES WITH RS-485/MODBUS INTERFACE

Series	Photo	Package Size	Technology	Normal Current (A)	Current Resistance (Microohms)	Initial Accuracy	Bandwidth	ADC Resolution	Operating Temperature	Storage Temperature	Speed	Supply Voltage
SSD-100A-R		110 mm	RS-485	± 100	300	± 0.1 % + 5 mA	5 kHz	24 bits	-40 °C to +115 °C	-55 °C to +125 °C	Up to 1100 RPS	5.0V, 55 mA Typical
SSD-500A-R		110 mm	RS-485	± 500	60	± 0.1 % + 5 mA	5 kHz	24 bits	-40 °C to +115 °C	-55 °C to +125 °C	Up to 1100 RPS	24V, 15 mA Typical

For full characteristics, see data sheet

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

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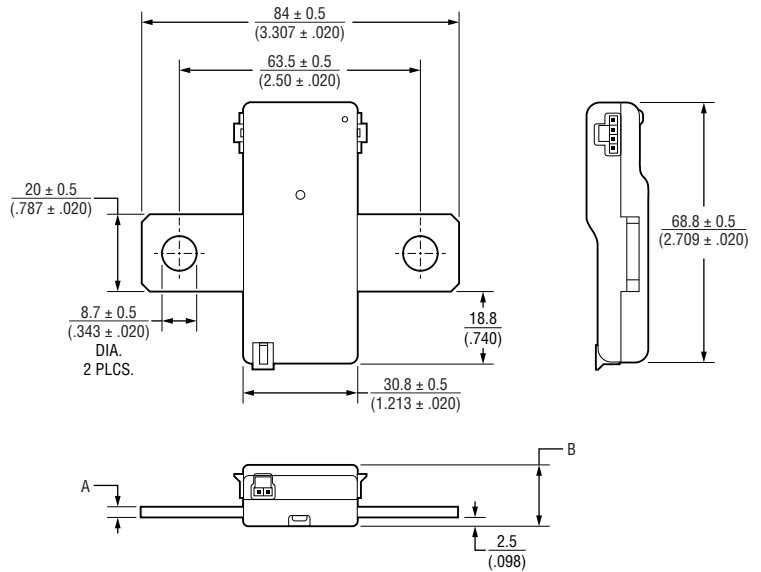
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PRODUCT DIMENSIONS

Dimension	SSD-100A	SSD-500A
A	$\frac{3.0 \pm 0.5}{(.118 \pm .020)}$	$\frac{4.0 \pm 0.5}{(.157 \pm .020)}$
B	$\frac{16.4 \pm 0.5}{(.646 \pm .020)}$	$\frac{17.4 \pm 0.5}{(.685 \pm .020)}$

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



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