NEW PRODUCT BRIEF

Riedon™ Model SSD-250A Series Current Sensor - Digital by Bourns

Advanced Current Sensors Deliver the Benefits of Digital

INTRODUCTION

The next products to be released in the digital shunt sensor line are the Riedon™ Model SSD-250A Current Sensor - Digital Series by Bourns. This series gives designers a highly integrated, high precision, compact, and cost-effective measurement solution with the added benefits of digital. Offered in an advanced System-in-Package (SIP), the Model SSD-250A delivers calibrated and temperature-compensated digital output, making these shunt sensors ideal current sensing solutions for 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 for Single Bit Errors
- Internal and External CRC Data Error Detection
- Advanced Non-Linear Temperature Compensation

HOW TO ORDER

SSD - 250A - x

Model

Nominal Current
- 250A = 250 A

Interface
- C = CANbus
- R = RS-485, MODBUS

BENEFITS

- Compact package; big performance
- Enhanced accuracy and operation stability
- 100 A, 250 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-250A-C		110 mm	CANbus	± 250	120	± 0.1 %	5 kHz	24 bits	-40 °C to +115 °C	-55 °C to +125 °C	Up to 1100 RPS	5.0 V, 55 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-250A-R		110 mm	RS-485	± 250	120	± 0.1 % + 5 mA	5 kHz	24 bits	-40 °C to +115 °C	-55 °C to +125 °C	Up to 1100 RPS	5.0 V, 55 mA Typical

For full characteristics, see data sheets

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

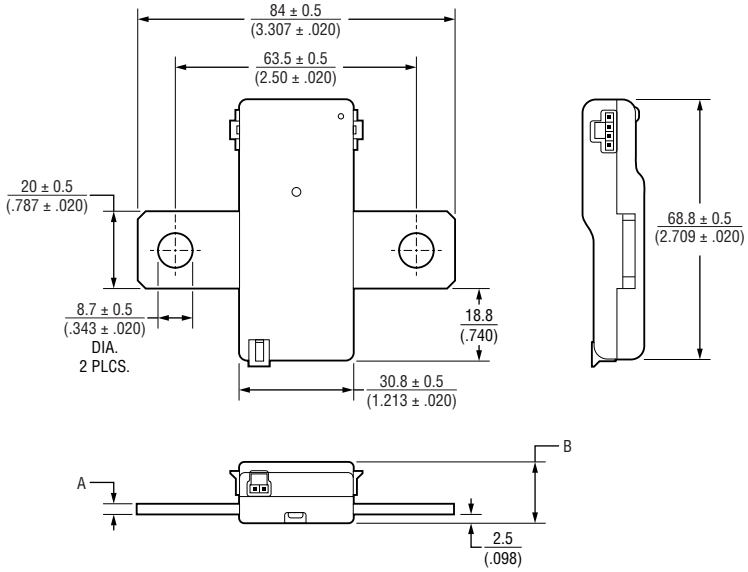
NEW PRODUCT BRIEF

Riedon™ Model SSD-250A Series Current Sensor - Digital by Bourns

PRODUCT DIMENSIONS

Dimension	SSD-100A SSD-250A	SSD-500A
A	3.0 ± 0.5 (.118 ± .020)	4.0 ± 0.5 (.157 ± .020)
B	16.4 ± 0.5 (.646 ± .020)	17.4 ± 0.5 (.685 ± .020)

DIMENSIONS: MM (INCHES)



www.bourns.com

Americas: *Tel* +1-951 781-5500
Email americus@bourns.com

EMEA: *Tel* +36 88 885 877
Email eurocus@bourns.com

Asia-Pacific: *Tel* +886-2 256 241 17
Email asiacus@bourns.com

Mexico: *Tel* +52 614 478 0400
Email mexicus@bourns.com