PRODUCT BRIEF

Bourns® Model SSD Shunt Sensor - Digital Series

Bringing a Digital Dimension to Revolutionary Shunt Sensing Technology

The New Bourns® Model SSD Shunt Sensor - Digital Series consists of a highly integrated System-in-Package (SIP) device with a high precision shunt to provide calibrated and temperature compensated digital output that can be used in a wide variety of battery related current sensing applications.

The Model SSD Shunt Sensor - Digital 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.

Smaller Package. Bigger Performance.

- 100 A Nominal Current (+2/-1 kA Peak Current)
- 1500 VDC Galvanic Isolation
- ±0.1 % Tolerance
- Available with CAN or RS-485 Output

Typical Applications

- Battery Systems
- Renewable Energy
- Motor Drives
- EV Charging Stations

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

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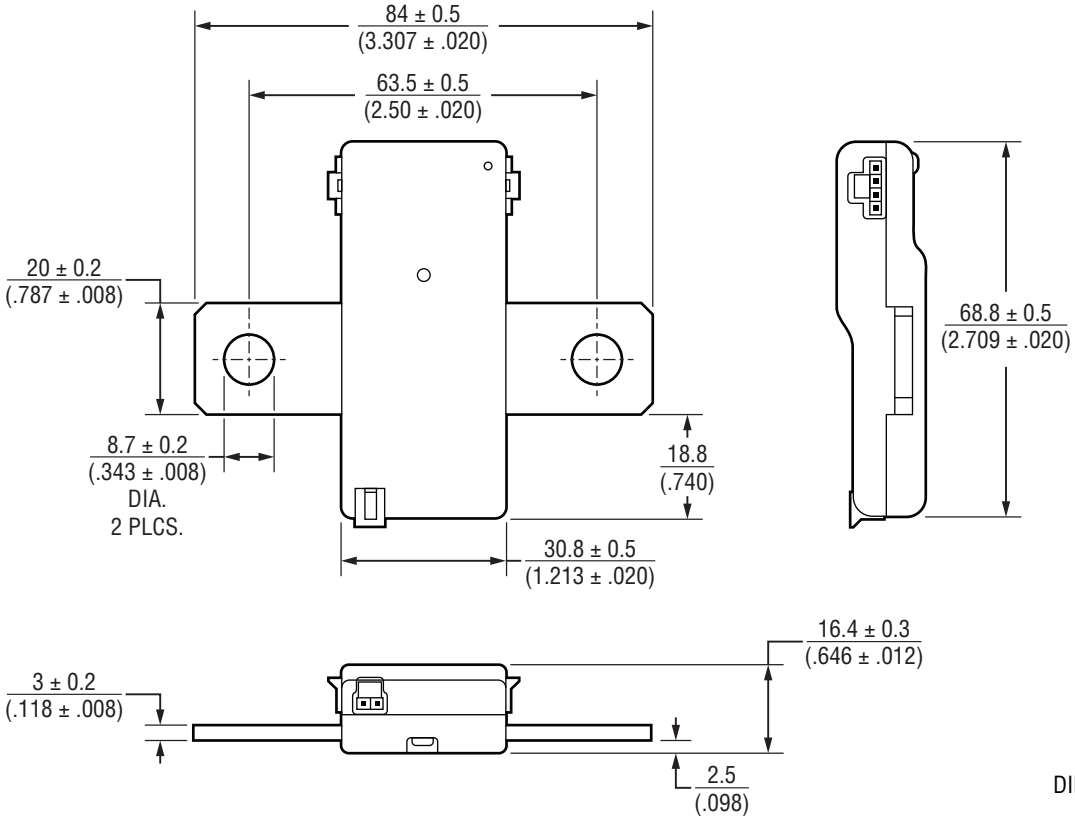
SPECIFICATIONS	
Model	**SSD-100A**
Nominal Current	± 100 A
Peak Current (Max. ADC Range)	± 2000 A
Shunt Resistance (Microohms) Excluding primary termination resistance	300
Initial Accuracy	< ± 0.1% + 5 mA
Linearity over Current Range	< ± 0.1% + 5 mA
Bandwidth	5 kHz
ADC Resolution	24 bits
Speed (readings per second)	up to 1100 rps (0.9 - 4200 ms per reading)
Supply Voltage (5 - 60 VDC)	@ 5 V, 55 mA typical
DC Bus Voltage Measurement	± 1200 VDC MAX (10 M input impedance)
Mass	67 g

*1200 VDC high side - contact Bourns



DIMENSIONS: MM (INCHES)

SSD-100A

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