ice components

ISE Current Sense Transducers: ISE-XXX-A-800

For the electronic measurement of AC and DC Signals

RoHS
compliant
2011/65/EU
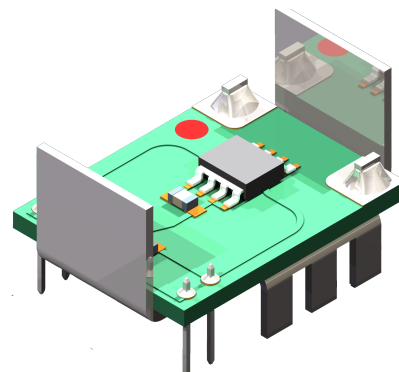
Part Number	I_P	Output Slope*
ISE-050-A-800	+/- 50	40.000 mV/A
ISE-100-A-800	+/- 100	20.000 mV/A
ISE-150-A-800	+/- 150	13.333 mV/A
ISE-200-A-800	+/- 200	10.000 mV/A

Features
- ✦ Fast Response Time
- ✦ Small Size
- ✦ PCB Mounting

Supply Voltage (V_{dd})	5V(+/- 0.5 V)@12mA
Secondary Output Voltage	Ratiometric to Input
Output at +Ip	90% of V_{dd}
Output at -Ip	10% of V_{dd}
Output at 0A	50% of V_{dd}
Max. Clamped Output, High	98% of V_{dd}
Max. Clamped Output, Low	5% of V_{dd}
Output Current	+/- 2 mA
Response Time	3 µS

IS Family Features
- ✦ Factory Programmable
- ✦ Customizable Current Range
- ✦ Wideband DC to 200 kHz
- ✦ Analog Output

Accuracy

Accuracy (I_P)**	<= 0.6 %
Linearity Error	<= 0.1 %
DC Offset Accuracy	<= 10 mV; <= 0.25 %
DC Offset Hysteresis	<= 10 mV; <= 0.25 %
DC Offset Thermal Drift	<= 0.1 mV/°C

Applications
- ✦ DC/AC Converters
- ✦ DC/DC Converters
- ✦ Battery Management
- ✦ AC and DC Motor Drives
- ✦ Welding Applications
- ✦ Solar Applications

General Data

Ambient Operating Temperature	-40 to +130 °C
Ambient Storage Temperature	-40 to +130 °C
Creepage Distance	1.4mm
Clearance Distance	1.4mm
Safety Standard	EN50178
EMC Standard	EN61000
CTI	600 V
UL File	Pending

Pin Configuration
1 - V_{SS} (Ground)
2 - V_{DD} (Supply)
3 & 4 - Busbar Termination
5 - Output
6 - V_{SS} (Ground)

Analog Output Notes
1. For pull down resistor is between Pin 5 and Pin 1 or 6
2. For pull up resistor is between Pin 5 and Pin 2

Absolute Maximums

Overvoltage V_{DD} Protection.	+10 V
Reverse V_{DD} Protection	-10 V
Output Voltage Max.	+10 V
Output Current Max.	+/- 70 mA
Reverse Output Voltage Max.	- 0.3 V
Reverse Output Current Max.	-50 mA

Notes

* All specifications at 25°C and assumes 5V_{DD}.
* Specifications dependent on mechanical attachment.
* Specifications are % full scale.
* Output slope is dependent on V_{DD}.

Dimensions: ISE Series (in mm, 1mm = 0.0394 inch)

+ BUSBAR CURRENT

17.1 OD (Busbar)

15.2 (Pin-to-Pin)

0.80 ± 0.05 Thick - BUSBAR

4

3

- BUSBAR CURRENT

10.8

11.5

+POLARITY MARKING

18.0

(0.75 Thick) - SHIELD

4.40 +0.10, -0.50

6X 2.67

3

(12.0)

4X 2.00

25.8 OD

23.3

4.65

2.54

5

6

2

1

4X 0.65 +/- 0.05 square

4.40 +0.10, -0.50