

Model RSS-A

Open Loop Hall Effect

Description

The RSS-A Series is a current sensor that accurately measures AC and DC currents and provides electrical isolation between the circuit being measured and the output of the sensor.

One package provides nominal current measurements from 100 to 1000 amps and has the versatility to be panel or bulkhead mounted.



Features

- High accuracy
- Wide frequency range
- Excellent linearity
- Safety isolation
- Heavy duty industrial housing
- Panel or bulkhead mounting
- Single or dual supply voltage option

Applications

- Motor controllers and drives
- Battery supplied equipment
- Switch mode and uninterrupted power supplies
- Welding equipment

Specifications

Electrical Data	Nominal Range	Measurement Range	Output (mV/A) RSS
-----------------	---------------	-------------------	----------------------

RSS-1000-A	1000 Amps	+ 1000 Amps	1.60
RSS-600-A	600 Amps	+ 600 Amps	2.67
RSS-500-A	500 Amps	+ 500 Amps	3.20
RSS-400-A	400 Amps	+ 400 Amps	4.00
RSS-300-A	300 Amps	+ 300 Amps	5.33
RSS-200-A	200 Amps	+ 200 Amps	8.00
RSS-100-A	100 Amps	+ 100 Amps	16.00

Overload Capacity	25,000 Amp Turns
Linearity	0.75% of Nominal
RSS-A Supply Voltage	±12 to ±18 VDC
Isolation Between Primary and Output.....	3KV RMS 50Hz for 1 minute
RSS-A Zero Offset (at +25°C).....	0.000 V ±10mV max
Zero Offset Drift	±1.0mV/ °C max
Gain Variation	±0.05%/ °C
Response Time	<3ms
di/dt Accurately Followed	>50 A/ms
Frequency Range	DC to 25 kHz, Core eddy current heating is produced when (RMS current x frequency) > 400,000

General Information

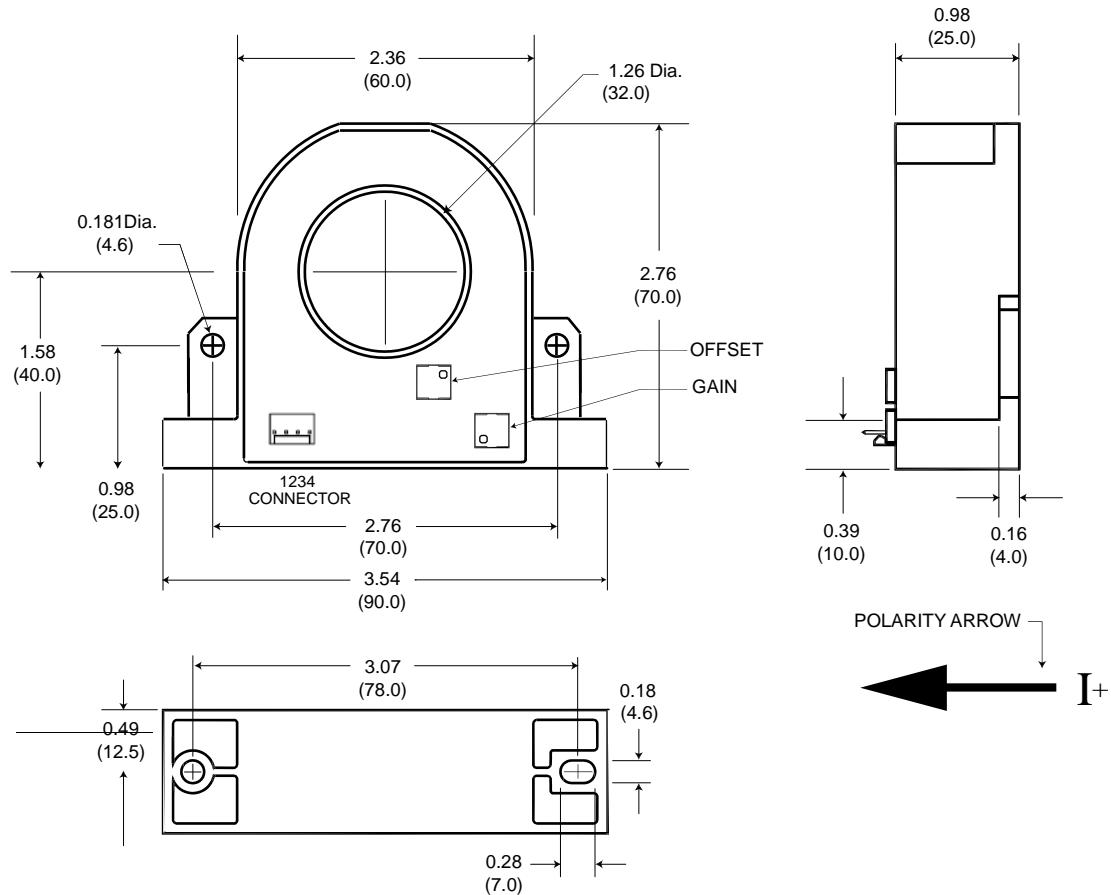
Operating Temperature	-40°C to +85 °C
Extended Operating Temperature	-40°C to +105°C
Storage Temperature	-55°C to +125°C
Current Consumption	30 mA max
Output Burden	10 mA max
Enclosure.....	UL94-VO Self Extinguishing Plastic
Insulation Resistance	500M Ohm min at 500V DC
Weight	240g nominal

Note: Due to continuous process improvement, all specifications are subject to change without notice.

Mechanical Dimensions

All dimensions are in inches (millimeters)

Model RSS-A



Mating Connector: Molex: Terminal 08-50-0114 (4 pieces), Connector 22-01-2047 (1 piece)

Connection Chart

PIN	RSS signals
1	+12 to +18Vdc
2	+6Vdc REF.
3	Output
4	Ground

Note: 1. Tolerance is $\pm 0.01"$ (± 0.25 mm)

2. Due to continuous process improvement, all specifications are subject to change without notice.