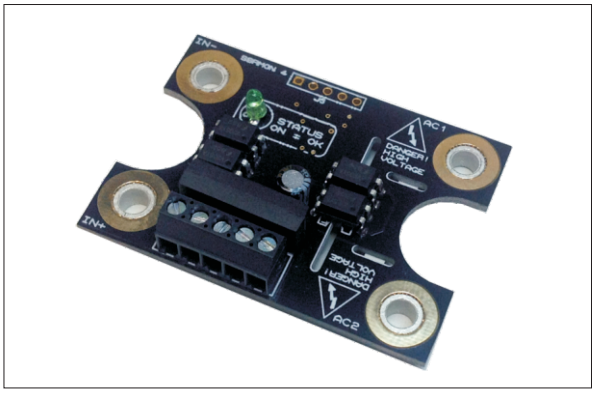
SSR / Heater Load Monitor
SSRMON2



- **Monitors SSRS/Heaters for failures**
- **Installs in seconds**
- **Small module mounts on SSR terminals**
- **Fits under some finger-safe covers**
- **Versatile relay contact output**
- **LED output indicator**

Product Description

The SSRMON2 monitors the condition of an SSR (solid state relay) and its load circuit. The SSRMON2 mounts directly on top of any standard SSR via the connection terminals and monitors the drive and output to detect a shorted SSR, open heater/load (*see notes), loss of line power and DC power.

Ordering Codes

SSRMON2*

*** SSRMON2 uses one ordering code which encompasses both 12 and 24V versions with interrupted and continuous operation.**

Input Specifications

Power Supply	**10 - 26VDC**
Control Input	**5 - 26VDC minimum off time of 100mS for best performance**
Control Input Impedance	**~4K Ohms**
Load Sense Input Voltage	**100 - 600VAC 50/60 Hz**
Input to Line Isolation Voltage	**4000VRMS (25degC for 1 second)**
Off State Blocking Voltage	**1200V Peak (1 minute max duration)**
Off State Leakage Current	**3mA RMS max across SSR output (SSRMON only / @600VAC)**
Response Time	**200mS (with control input off)** **750mS from last off cycle (1 sec cycle time 50% duty cycle)** **2.5Sec from last off cycle (1 second cycle time 95% duty cycle)** **Up to 15 seconds when using the Interrupted Input**

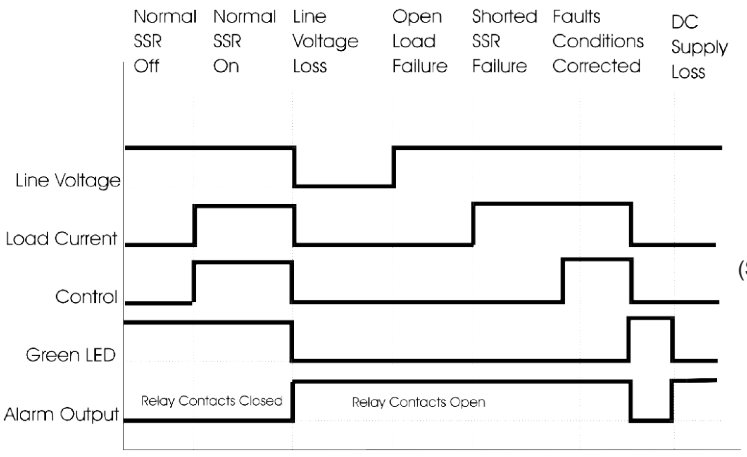
Output Specifications

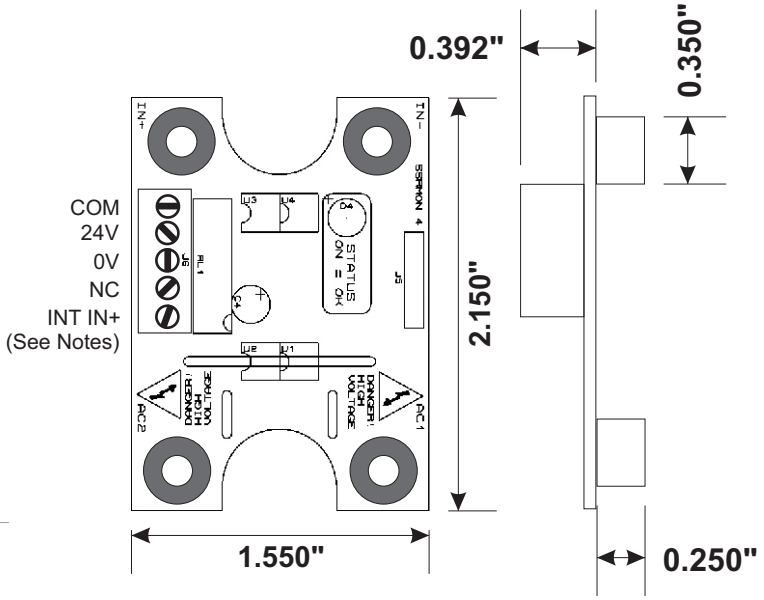
Alarm Output	**Relay Contact 48 VDC/0.05 A max (non inductive/non capacitive).** **Contacts open upon fault or loss of power.** **Contacts are closed when no faults are present.**

Thermal Specifcations

Operating Temperature Range	**0 to 50 degC**
Storage Temperature Range	**-40 to 100 degC**

Dimensions & Signals





Continuous Mode: The control input is wired to the standard IN- and IN+ of the SSR input terminals for continuous mode operation.
Interrupted Mode: The control input is wired to the IN- of the SSR and the INT IN+ of the SSRMON. Interrupted mode provides a brief off signal of 150mS every 15 seconds to test the input to output logic of the relay.

*Notes: To reliably detect an open load, the load current must drop below 60uA when the load is opened. Any residual leakage in the wiring or load break may cause the SSRMON to not be able to detect the open load condition. Using the SSRMON with an SSR that has an on-board snubber will improve the reliability of the detection because it will present a lower impedance to the load circuit and raise the 60uA detection threshold to a higher value, typically around 300uA. If that threshold is not high enough, a power resistor or external R-C snubber (0.47uF/100R) may be added in parallel with the SSR output. The resistor or snubber should be chosen so that when the load is open, the voltage across the SSR drops below 20VAC.