OVENindustries
ELECTRONIC CONTROL SOLUTIONS

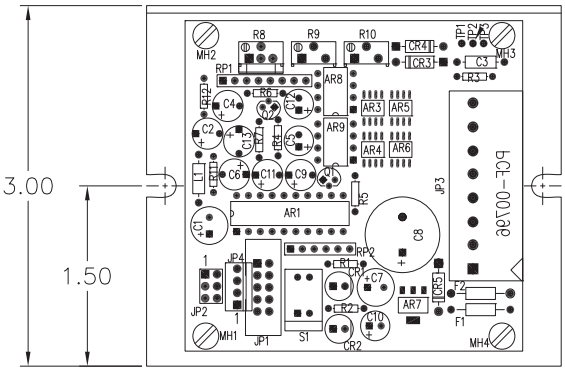
5R7-570A THERMOELECTRIC CONTROLLER

This open board temperature controller with remote set temp. pot and knob with dial scale is specifically designed with a proportional integral control algorithm to provide the most precise control to thermoelectric (Peltier effect) modules at the most economical price.

The H bridge control provides a seamless transition between heating and cooling eliminating dead spots. Green LED for heat and blue LED for cooling indicate mode and simultaneous illumination indicates the load circuit is off due to an open sensor. Pulse Width Modulation controls the power level in the thermoelectric module at a base frequency of 1Khz. Power resolution is one of ±250 steps in the load circuit control.

FEATURES

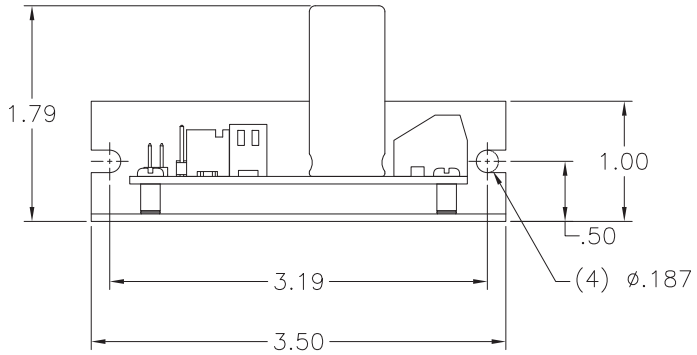
- Solid State H-Bridge Control
- Bi-Directional Control (Seamless Transition)
  - Green LED Heating Mode
  - Blue LED Cooling Mode
- Proportional Integral control algorithm
- Pulse width modulated output
- RoHS Compliant
- Plugable connection



RoHS Compliant

SPECIFICATIONS

- Input Voltage: 6 to 28 VDC
- Output Voltage: 0 to 36 VDC
- Load Current: 0.1 to 12.5 A
- Temperature Resolution: 0.1°C
- 1 to 16°C Adjustable Bandwidth
- 0 to 2.55 repeats per minute adjustable integral rate
- Temperature Range: -20 to 150°C
- Control Stability: ± 0.1°C
- 450 W output power control
- 1 Khz base frequency pulse width modulated output
- 1.79” H x 3.5” W x 3” D
- Customer Drawing: CDR-00232



ACCESSORIES

- 5R7-551 LED Temperature Display
- Sensor Selection:
  - TR67 ± 1°C, -20 to 100°C
  - TR104 ± 1°C, 0 to 150°C