

## 3A TEC Controller TA-300

### 1. FEATURES:

- $\pm 3$ Amp Drive Capability
- Current Ripple <1%
- Temperature Stability 0.01°C
- Temperature control range: 0°C to 50°C
- Power Supply: +5V, Optionally: +3.3V
- Over Current and Thermal Protection
- Compact Size: 1.85" x 1.45" x 0.39"

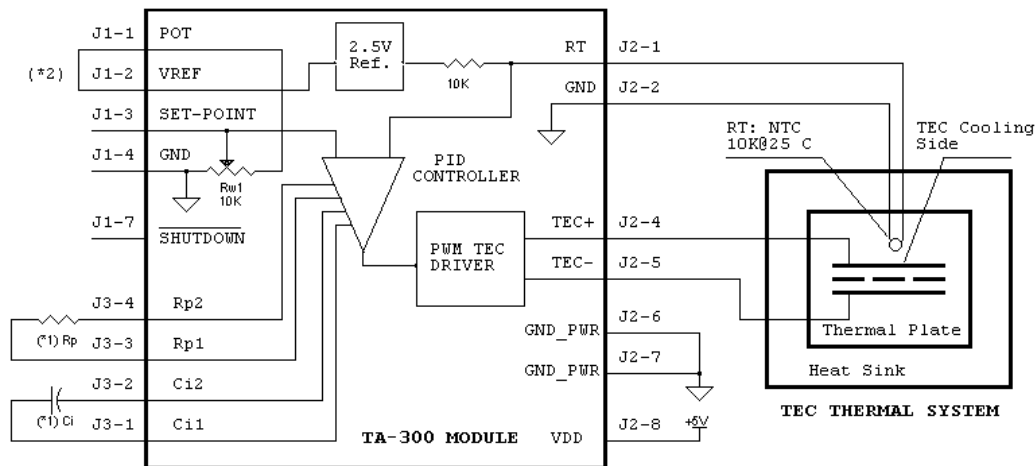


### 2. DESCRIPTION

The TA-300 module is a Bi-directional Temperature Controller for Thermoelectric Coolers (TEC) used in fixed temperature applications. The module is designed to operate with a 10K Negative Temperature Coefficient (NTC) thermistor. TA-300 can provide temperature stability of 0.01°C.

The TA-300 provides an on-board trim pot for set-point adjustment. The temperature can also be set by a DC input signal. The Gain adjustment and the integral time adjustment are achieved by connecting a resistor (Rp) and a capacitor (Ci).

### 3. TYPICAL APPLICATIONS



(\*1) The value of Rp and Ci is defined by the system optimization.

(\*2) When using external signal as temperature set-point, disconnect J1-1 & J1-2. Apply the signal on J1-1 and adjust RW1 to get the required scale.

You are welcome to contact us for details and quotation by phone, Fax, or e-mail.