WTC3243 2.2 A Temperature Controller

- Ultrastable PI control
- Drive ±2.2A of TEC or RH current
- Linear Stability: 0.0009°C
- Small size: 1.3" x 1.28" x 0.313"
- Heat and cool current limits
- Supports Thermistors, RTDs, IC sensors
- Single supply operation: +5 V to +30 V
- Adjustable sensor bias current
- 14 pin DIP PCB mount
- Monitor Actual Temperature

Supply Range: +5 to +30 V
Temperature Control Output Current: up to ±2.2 A
Temperature Stability: 0.0009°C (10 kΩ thermistor at 25°C) over one hour
Stability across ambient: 0.002°C (10 kΩ thermistor at 25°C) over an hour ---- Ideal for scanning app

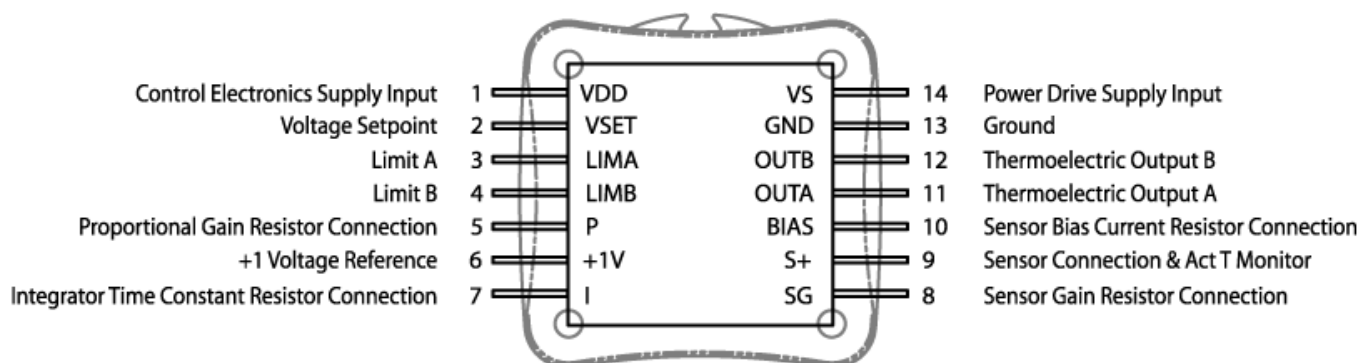**Setpoint vs. Actual Temperature Accuracy:** 2 mV typical

Features:
-Heat and Cool Current Limits
-PI controller minimizes overshoot and time to temperature
-Compatible with multiple sensors
-Adjustable sensor bias current optimizes sensor feedback voltage
-Can operate with unipolar current for Resistive Heaters

Maximum Power Dissipation: 9 W
Heatspreader Temperature Rise: 30°C / W without external heatsinking

14 pin DIP PCB Mount size: 33 x 32 x 8 mm

WTC3243 Temperature Controller Pinout - Top View

Control Electronics Supply Input	1	VDD	VS	14	Power Drive Supply Input
Voltage Setpoint	2	VSET	GND	13	Ground
Limit A	3	LIMA	OUTB	12	Thermoelectric Output B
Limit B	4	LIMB	OUTA	11	Thermoelectric Output A
Proportional Gain Resistor Connection	5	P	BIAS	10	Sensor Bias Current Resistor Connection
+1 Voltage Reference	6	+1V	S+	9	Sensor Connection & Act T Monitor
Integrator Time Constant Resistor Connection	7	I	SG	8	Sensor Gain Resistor Connection

NOTE: The WHY5640 and WTC3243 do NOT have the same pin configuration.