

PowerCycling PC Series Thermoelectric Cooler

Note: This product is not recommended for new designs.

Series.

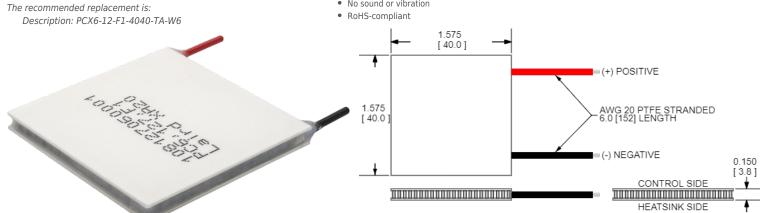
This product series has been replaced with the PowerCycling PCX

# Features

- High thermal cycling capability
- Precise temperature control
- Reliable solid-state operationNo sound or vibration

#### **Applications**

- Thermoelectric Modules Accelerate PCR Thermal Cycling
- DNA Amplification (PCR)

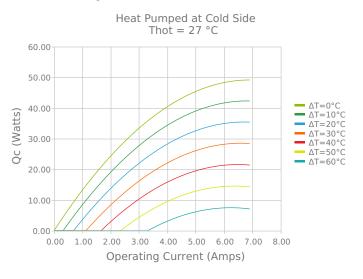


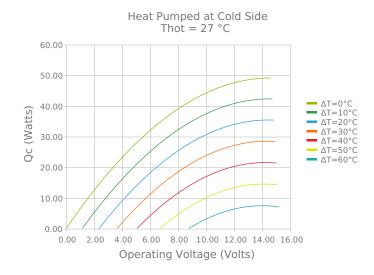
CERAMIC MATERIAL: Al₂O₃ SOLDER CONSTRUCTION: 232°C, SbSn

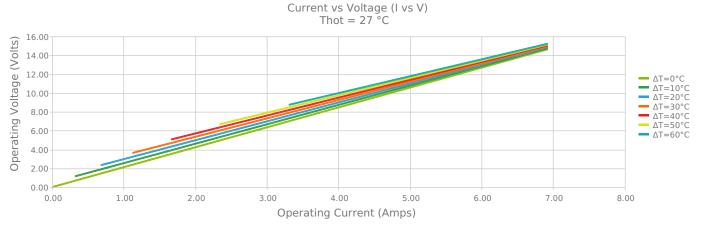
INCHES [ MM ]

## **ELECTRICAL AND THERMAL PERFORMANCE**

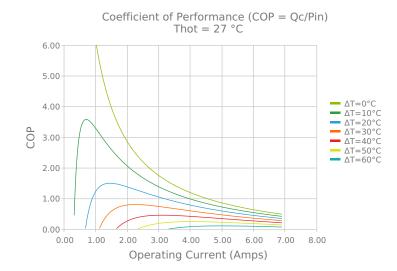
For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less impactful if located on the side that attaches to the heat exchanger.

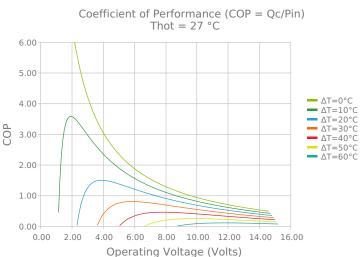


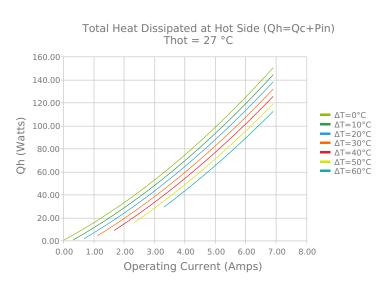


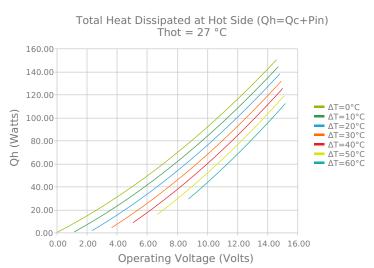


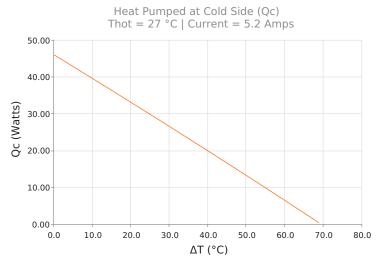


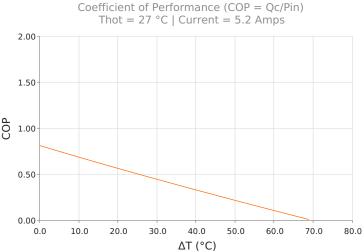














## **SPECIFICATIONS\***

**Hot Side Temperature** 

 $Qcmax (\Delta T = 0)$ 

 $\Delta T max (Qc = 0)$ 

Imax (I @ ATmax)

Vmax (V @  $\Delta$ Tmax)

**Module Resistance** 

**Max Operating Temperature** 

Weight

27.0 °C	50.0 °C	80.0 °C
49.1 Watts	53.3 Watts	57.8 Watts
70.5°C	78.8°C	88.8°C
6.1 Amps	6.0 Amps	5.9 Amps
13.9 Volts	15.4 Volts	17.4 Volts
2.11 Ohms	2.37 Ohms	2.69 Ohms
120 °C		
21.0 gram(s)		

## **FINISHING OPTIONS**

Suffix	Thickness	Flatness / Parallelism	<b>Hot Face</b>	Cold Face	<b>Lead Length</b>
TA	$3.800 \pm 0.025 \text{ mm}$ $0.150 \pm 0.0010 \text{ in}$	0.025 mm / 0.025 mm 0.001 in / 0.001 in	Lapped	Lapped	152.4 mm 6.00 in

#### **SEALING OPTIONS**

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

## **NOTES**

- 1. Max operating temperature: 120°C
- 2. Do not exceed Imax or Vmax when operating module
- 3. Reference assembly guidelines for recommended installation
- 4. Solder tinning also available on metallized ceramics

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<sup>\*</sup> Specifications reflect thermoelectric coefficients updated March 2020