



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





The PC Series of thermoelectric modules (TEMs) are designed to operate under cycling conditions. This product line is available in multiple configurations and is ideal for applications that require both heating and cooling mode (reverse polarity). Assembled with proprietary solder construction, Bismuth Telluride semiconductor material and thermally conductive Aluminum Oxide ceramics, the PC Series is designed for higher current and larger heat-pumping applications.

## FEATURES

- Thermal Cycling Durability
- Power Cycling Reliability
- Precise Temperature Control
- Strong Lead Attachment
- RoHS Compliant
- Continuous Operation at High Temperatures

## APPLICATIONS

- Analytical Instrumentation
- PCR Cyclers
- Thermal Test Sockets
- Electronic Enclosure Cooling
- Chillers (Liquid Cooling)
- Power Generation

## PERFORMANCE SPECIFICATIONS

Hot Side Temperature (°C)	25°C
Qmax (Watts)	61.4
Delta Tmax (°C)	73
I <sub>max</sub> (Amps)	5.0
V <sub>max</sub> (Volts)	20.0
Module Resistance (Ohms)	3.32

THICKNESS	FLATNESS & PARALLELISM	HOT FACE	COLD FACE	LEAD LENGTH
0.146" ± 0.001"	0.001" / 0.002"	Lapped	Lapped	13.78"
3.70 ± 0.02 mm	0.02 / 0.04mm	Lapped	Lapped	350 mm

## SEALING OPTION

SUFFIX	SEALANT	COLOR	TEMP RANGE	DESCRIPTION
R	RTV	White	-60 to 204 °C	Non-corrosive, silicone adhesive sealant
E	Epoxy	Black	-55 to 150 °C	Low density syntactic foam epoxy encapsulant

Americas: +1 888.246.9050

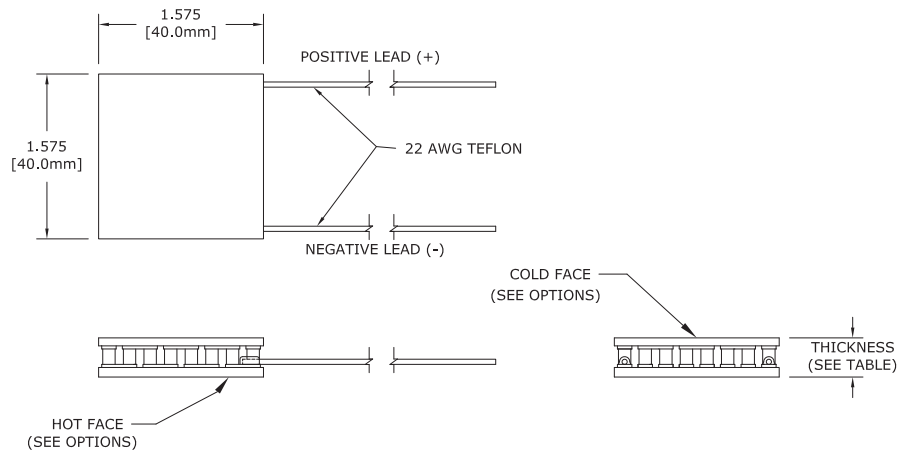
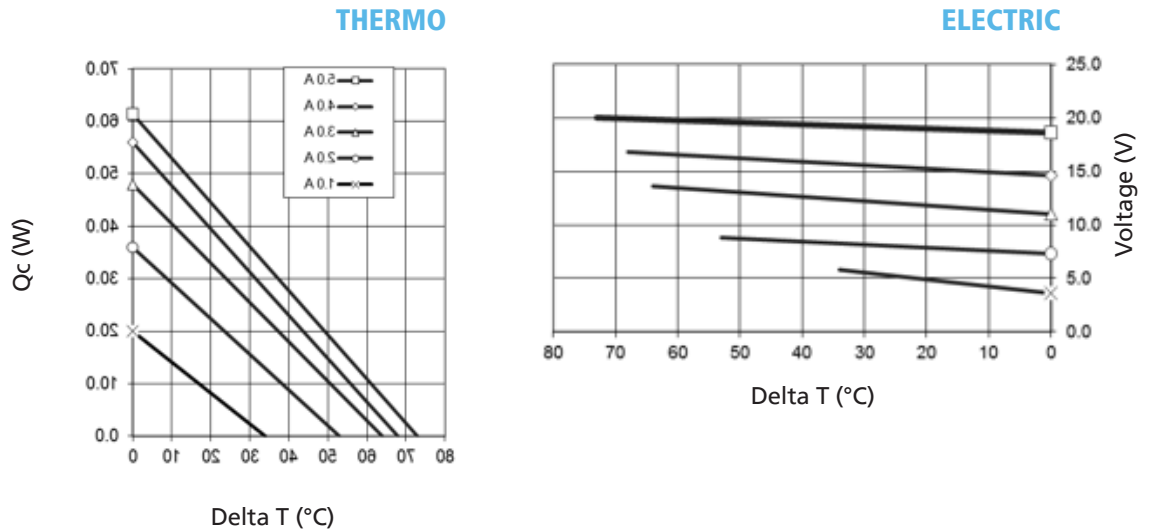
Europe: +46.31.420530

Asia: +86.755.2714.1166

clv.customerpos@lairdtech.com

www.lairdtech.com

Performance Curves at Th = 25°C



Ceramic Material: Alumina (Al<sub>2</sub>O<sub>3</sub>)  
Solder Construction: 271°C, Proprietary

### OPERATING TIPS

- Max Operating Temperature: 175°C
- Do not exceed I<sub>max</sub> or V<sub>max</sub> when operating module
- Reference assembly guidelines for recommended installation

THR-DS-TMC, 161, 12, 13, S, AS 0813

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies products are sold pursuant to the Laird Technologies Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2013 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trade marks or registered trade marks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.