阅读申明

1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描叙上的差异，建议读者做出适当判断。
4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.

2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader’ s learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.

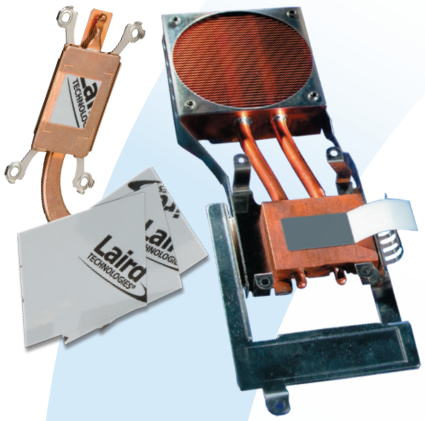
3. All product information provided on the website refer to solutions from manufacturers’ technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.

4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with “Datasheets”.

Laird TECHNOLOGIES

Innovative **Technology** for a **Connected** World

Tpcm™ 580S



HIGH PERFORMANCE PHASE CHANGE MATERIAL

Tpcm™ 580S are high performance thermal phase change materials designed to meet the thermal, reliability, and price requirements of high end thermal applications. Tpcm™ 580S is inherently tacky, flexible and exceptionally easy to use.

At temperatures above its transition temperature of 50°C (122°F), Tpcm™ 580S begins to soften and flow, filling the microscopic irregularities of the components it contacts. The result is an interface with minimal thermal contact resistance. Due to the gradual change in viscosity (softening), Tpcm™ 580S minimizes migration (pump out).

Tpcm™ 580S can be supplied as cut parts in strips and rolls with top tabbed liners for easy application. The top tabbed liner can be removed immediately or provide a protective cover during shipping and removed at assembly. Tpcm™ 580S can also be supplied in sheets and custom die cut configurations. Tpcm™ 580S meets all environmental requirements including RoHS.

FEATURES AND BENEFITS

- Low total thermal resistance (0.013°C-in²/W at 50 psi)
- Inherently tacky and easy to use - No adhesive required
- High reliability
- Meets all environmental requirements including RoHS
- Provides high value price / performance point

APPLICATIONS

- Microprocessors
- Memory chipsets
- Graphic processing chips
- Custom ASICS

	Tpcm™ 588S	Tpcm™ 5810S
Construction and Composition	Non-reinforced film	Non-reinforced film
Color	Gray	Gray
Thickness	0.008" (0.2 mm)	0.010" (0.25 mm)
Density	2.87 g/cc	2.87 g/cc
Operating Temperature Range	-40 to 125°C (-40 to 257°F)	-40 to 125°C (-40 to 257°F)
Transition Temperature	50°C (122°F)	50°C (122°F)
Thermal Resistance Modified ASTM D5470		
10 psi	0.015°C-in²/W (0.097°C-cm²/W)	0.015°C-in²/W (0.13°C-cm²/W)
20 psi	0.011°C-in²/W (0.071°C-cm²/W)	0.011°C-in²/W (0.10°C-cm²/W)
50 psi	0.010°C-in²/W (0.064°C-cm²/W)	0.010°C-in²/W (0.08°C-cm²/W)
Thermal Conductivity	4.0 W/mK	4.0 W/mK
Volume Resistivity	1.4 x 10^{12}ohm-cm	1.4 x 10^{12}ohm-cm
Hardness	50 (Shore 00)	50 (Shore 00)
Approximate Bondline Thickness	@ 10 psi = 0.0015 in @ 50 psi = 0.001 in	@ 10 psi = 0.0015 in @ 50 psi = 0.001 in

STANDARD PACKAGING

Sheets: 9" x 9" (228.6 mm x 228.6 mm)
18" x 18" (457.2 mm x 457.2 mm)

Cut Parts: On strip with top tabbed liner
Individual cut through

global solutions: local support™

Americas: +1.888.246.9050
Europe: +49.8031.2460.0
Asia: +86.755.2714.1166

CLV-customerservice@lairdtech.com
www.lairdtech.com/thermal

THR-DS-Tpcm-580S 0512