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.

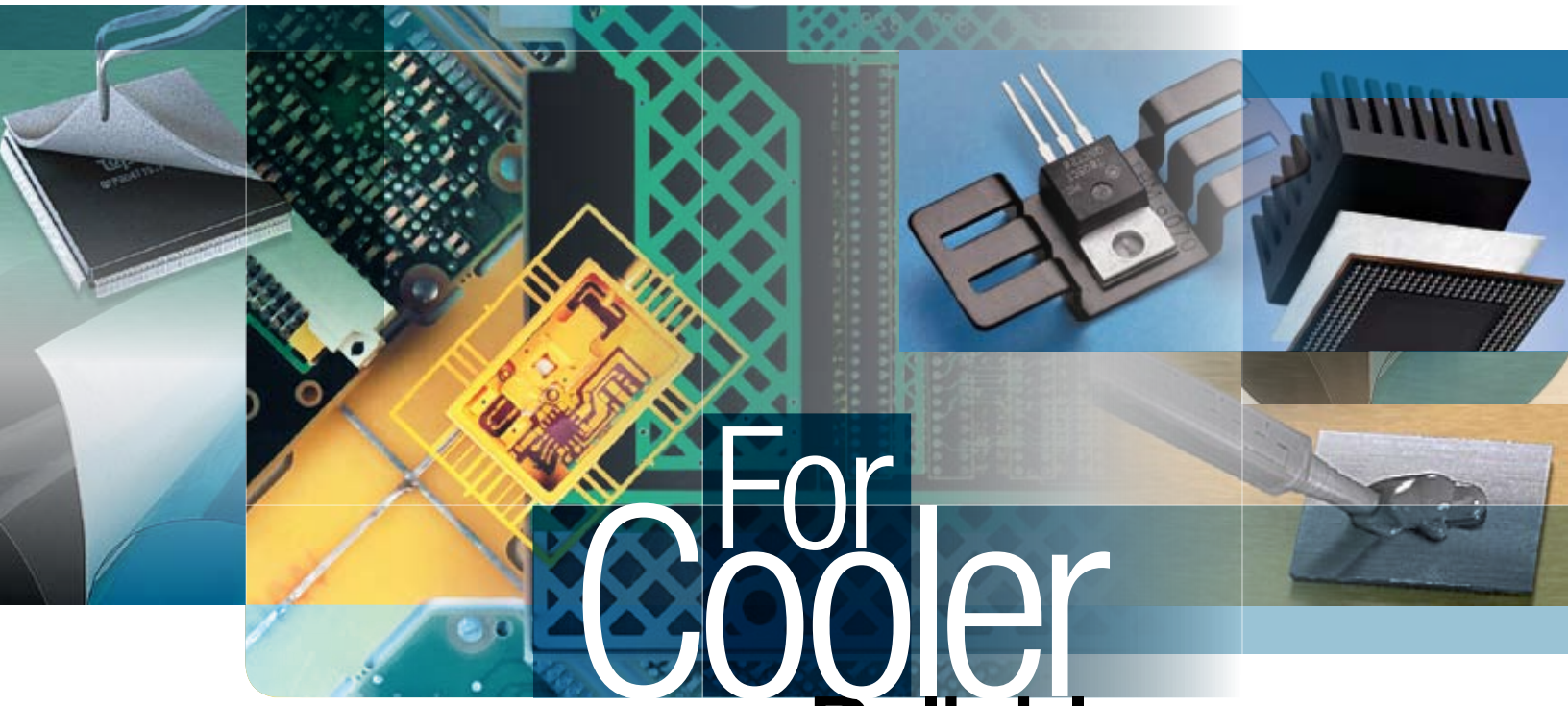
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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

3M™ Thermally Conductive Acrylic Interface Pads 5589H and 5590H

For applications requiring gap filling and non-silicone construction



For Cooler More Reliable Devices

Used to transfer heat from hot surfaces or devices to cooler surface region of assembled devices.

- Excellent conformability, gap filling property that provides excellent heat flow
- Excellent environmental durability
- Range of thermal performance to 100°C

Designed with filled acrylic polymer to be used for non-silicone applications.

Available in 240 mm × 20 meter rolls for improved converting processing.

Lower cost solution than Silicone Thermal Interface Pads.

3M

Selection Guide

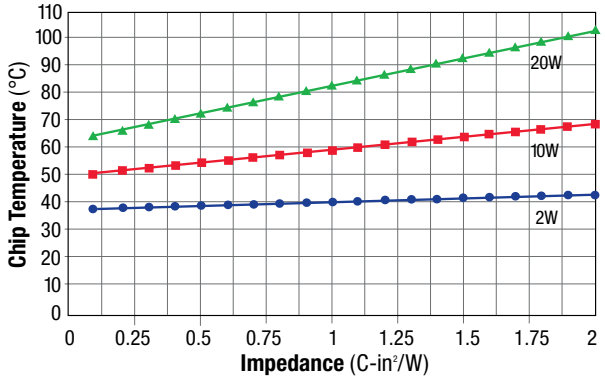
Product	Description				Adhesion/Shore 00 Softness	Thermal Performance		Dielectric Properties			
	Base Material Type	Product Thickness mil (mm)	Filler Type	Liner Type	Adhesion Characterization /// Shore 00 Testing based on TM 6mm Thickness	Conductivity (W/m-K 3M ASTM D5470 TM)	Impedance**** °C-in²/W (°C-cm²/W)	Dielectric Strength KV/mm (Film version tested)	Volume Resistivity (ohm/cm)	UL Flammability Rating	Potential Operating Temperature Range*** (°C)
5589H* Soft Pad	Filled Acrylic Polymer	40(1.0) 60(1.5)	Ceramic	PET	No added adhesive layer. Pad is tacky and conformable /// Asker C=16	2.0	1.33 (8.6) 1.67 (10.8)	21	3.4×10^{12}	UL VO	Short Term (Hours-Days): 110°C Long Term (Weeks-Months): 80°C
Note: *1) 3M Pad 5589H has a very low tack surface and a medium tack surface.											
5590H* Soft Pad	Filled Acrylic Polymer	20(0.5) 40(1.0) 60(1.5)	Ceramic	PET	No added adhesive layer. Pad is tacky and conformable /// Asker C=30	3.0	0.46 (3.0) 0.70 (4.5) 0.95 (6.1)	33	2.7×10^{12}	UL VO	Short Term (Hours-Days): 110°C Long Term (Weeks-Months): 80°C
Note: *1) 3M Pad 5590H has a very low tack surface and a medium tack surface.											

***End use application testing will determine final temperature range based on final design and other environmental conditions. Suggested Temperature range is based on a UL-746 Test Method or a 3M Test Method.

Application Note

If user needs to have pad adhesively held in place, 3M™ Adhesive Transfer Tape 9461P is a 1 mil high temperature acrylic transfer adhesive that bonds well to the 3M™ Thermally Conductive Acrylic Interface Pad and to many metal surfaces used for dissipating the heat.

Effect of Thermal Interface Impedance and Device Power on Chip Temperature



Important Notice: Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability: 3M's product warranty is stated in its Product Literature available upon request. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.

Electronics Markets Materials Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
www.3M.com/electronics
1-800-251-8634

Please recycle. Printed in USA.

Issued: 9/09 6994 (HB)
60-5002-0428-8