

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!



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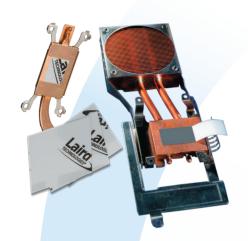




for a **Connected** World







Tpcm[™] 670 is a high performance, inherently tacky, easy to rework phase change thermal interface material. Developed specifically to meet the high thermal conductivity and low thermal resistance requirements of Intel® mobile processors. Tpcm 670 is optimized for multi-core and general CPU and GPU processors including Intel's Penryn Quad-Core mobile processor.

FEATURES AND BENEFITS

- Minimizes contact thermal resistance by filling the microscopic irregularities of the components it contacts. Begins to soften and flow at approximately 48°C.
- Designed to minimize migration (pump out) at CPU operating temperatures using a unique material formulation that softens, but does not fully change phase.
- Naturally tacky at room temperature, requiring no adhesive.
- Heat sink preheating not required.
- Supplied on tabbed liners for easy manual or automatic application.
- Exceptionally high reliability.
- Available with Laird Technologies easy release DF (patent pending) layer. DF (patent pending) minimizes the force required to disassemble after burn-in while still maintaining the highest possible thermal performance and exceptional reliability.

PROPERTIES	Tpcm™ 670	*Tpcm™ 670DF	TEST METHOD
Color	Grey		Visual
Thickness, inches (mm)	0.008" (0.20) 0.010 (.25)	0.005 (0.125) 0.008" (0.20) 0.010 (.25)	
Thickness Tolerance, inches (mm)	+/-0.001" (0.025)		
Construction & Composition	Non-reinforced Film		
Specific Gravity, g/cc	2.50		Helium Pycnometer
Shelf Life	1 year		
Operating Temperature Range, °C	-40 to 125°C		
Phase Change Softening Range,°C	45 to 70°C		
Thermal Conductivity, W/mK	4.3		Hot Disk Thermal Constants Analyzer
Thermal Resistance Outer core, 25 micron die height offset, °C-cm²/W, (°C-mm²/W)	0.117 (11.7)		Intel Mobile TIM Teste
50 psi °C-in²/ W	0.010	0.025	ASTM D5470 (modified
345 Kpa, °C-cm²/W	0.065	0.161	ASTM D5470 (modified

^{*} patent pending

global solutions: local support ™

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THR-DS-Tpcm-670-670DF 0910

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