

PTM6880

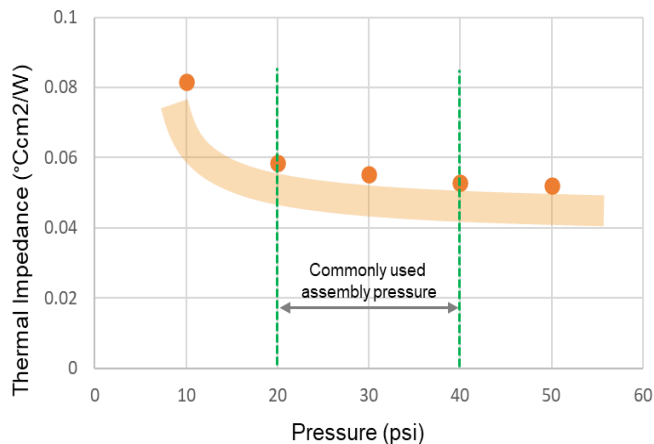
High Thermal Conductivity Phase Change Material

Honeywell's PTM6880, a high thermally conductive Phase Change Material (PCM) in pad format, is designed to minimize thermal resistance at interfaces, maintain excellent thermal performance through reliability testing required for long product life applications with super non-pump out property.

Based on a novel polymer PCM system, this material exhibits excellent interface wettability during typical operating temperature ranges, resulting in extremely low surface contact resistance.

The proprietary material provides superior reliability (pass 150°C baking 1000 hours, thermal shock 1000 cycles, and maintains low thermal impedance (<0.06°C.cm²/W @ no shim), making the PTM6880 desirable for high performance integrated circuit devices.

PTM6880 Thermal Impedance (TI) vs Pressure



PTM6880 is ideal for high performance AI Data Center & Enterprise computing applications with super non-pump out property.

Honeywell TIMs Serve Multiple Applications



Automotive & Power



AI/Data Center



Telecomm



Consumer Electronics



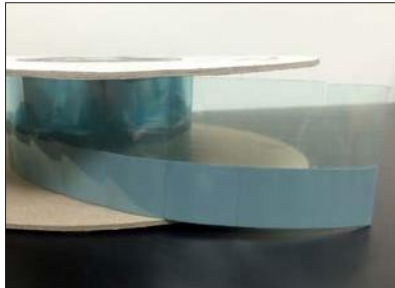
Power Industry

FEATURES & BENEFITS

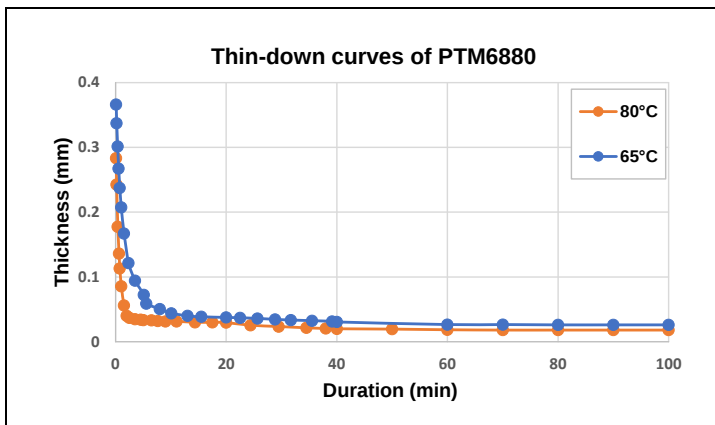
- High performance filler and polymer technology
- Phase change at 45°C
- Highly conductive filler loading to optimize performance
- Superior handling and reworkability
- Superior reliable thermal performance
- Available in both pad and paste formats

PTM6880 Technical Information

Physical Properties	Unit	Test Method	PTM6880
Thermal Conductivity	W/m·K	ASTM D5470	6.0
Thermal Impedance @ no shim	°C·cm²/W	ASTM D5470 Modified	0.056
Specific Gravity	g/cm³	ASTM D374	2.7
Viscosity	Pa·s @ 210 ₁ /s, 25°C	Rheometer HON	N/A
Volume Resistivity	Λ·cm	ASTM D257-700	2.1x10 ¹⁴



PTM6880 pad format. It will be also available in paste/ printable format in the future.



STORAGE CONDITION

Refer to product label.

THERMAL IMPEDANCE POST RELIABILITY (ASTM E1461)

End of Line	0.06°C·cm²/W
Bake 150°C, 1000 h	0.07°C·cm²/W
Double 85, 1000h	0.06°C·cm²/W
Thermal shock (-40°C to +125°C, 1000 cycles)	0.06°C·cm²/W

Product Use

Clamping pressure and temperature are suggested to achieve a minimum bond line thickness of the thermal interface material, typically less than 1.5 mil (0.038mm) for best performance. The material must go through the phase change temperature to exhibit entitlement performance.

More Honeywell TIMs

PTM6880 is part of Honeywell's TIM Solutions family of phase change materials. Whatever the thermal challenge, we offer a TIM product that provides just the right characteristics for your application. Find out more about:

PTM8000 Series PTM7000 Series
PTM6000 Series PTM5000 Series
PCM45F Series LTM Series

By visiting: electronicmaterials.com



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DS.0318Rev1
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