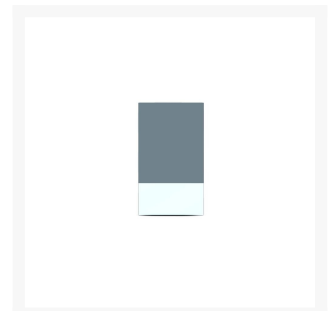
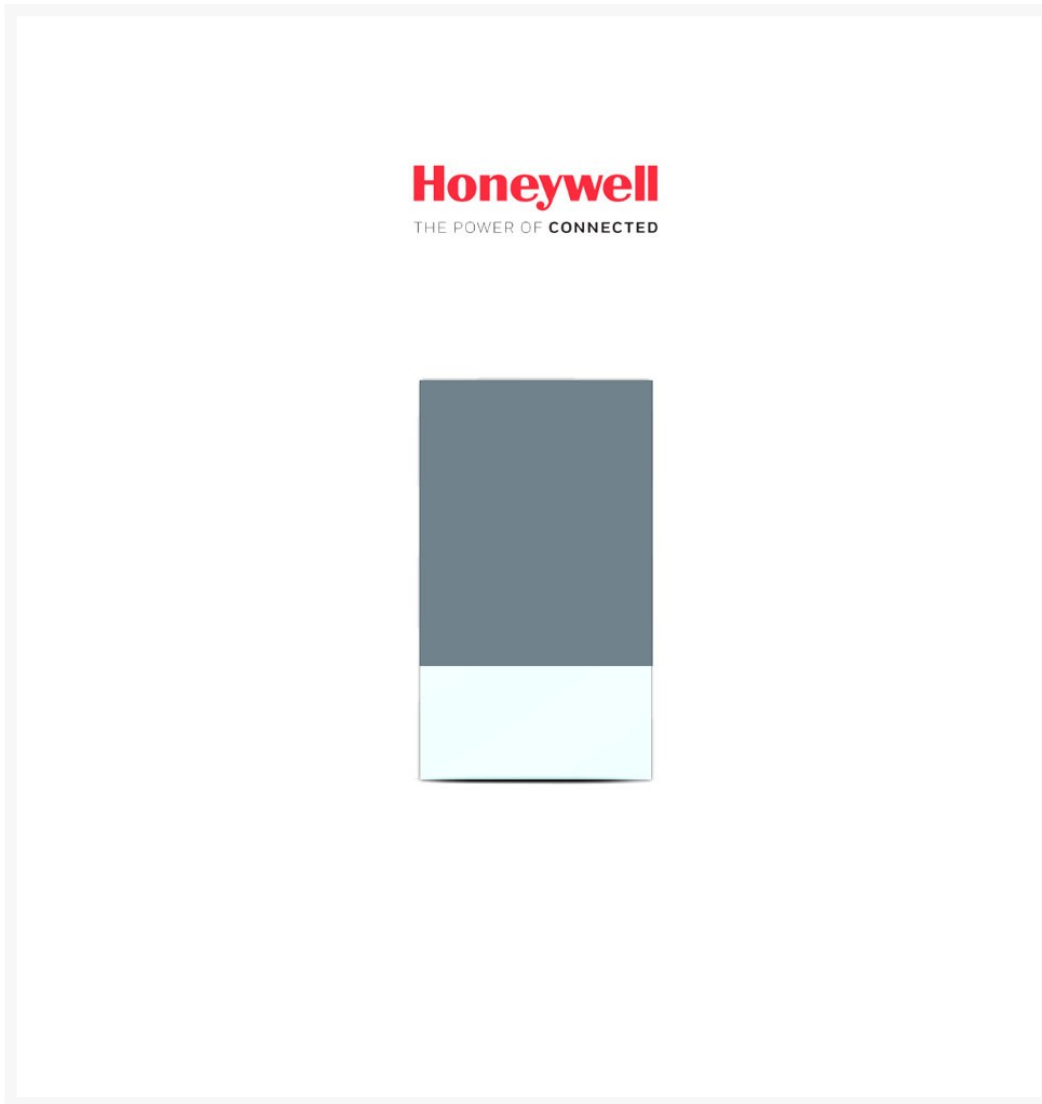




# Honeywell PTM7950 SP Super Highly Thermally Conductive PCM Pad

As low as  
**\$6.29**

## Product Images



**Honeywell PTM 7950SP**  
8.5W/M.K

**8.5** <sup>W/M.K</sup>

www.mdsbw.com

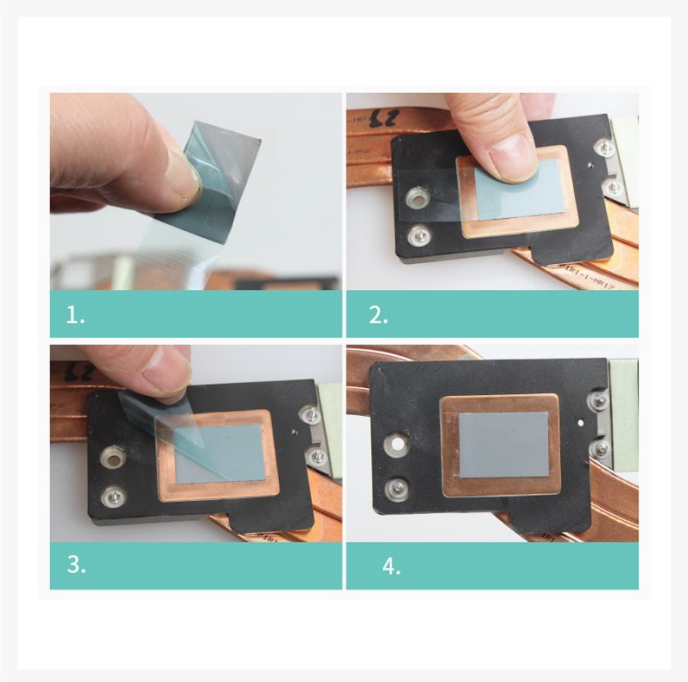
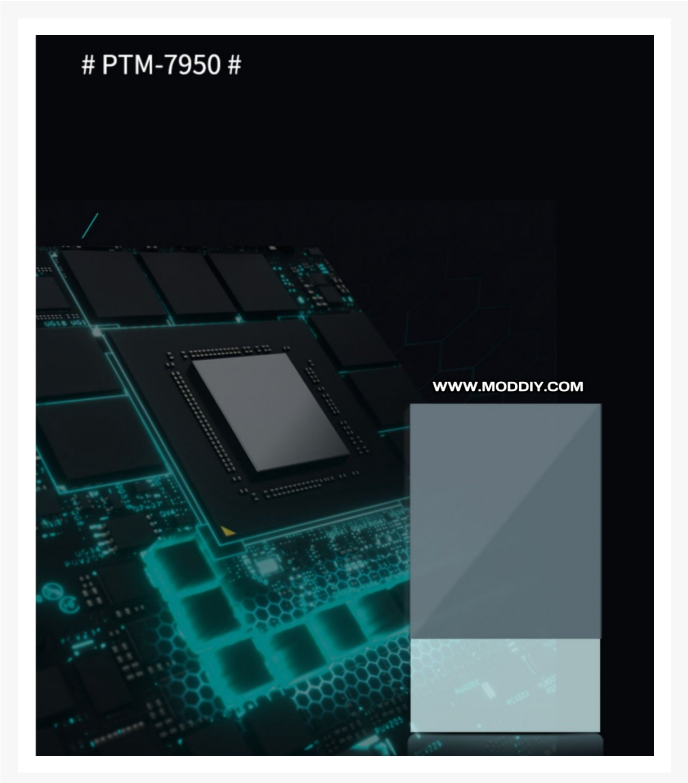
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**Honeywell PTM 7950SP**  
0.04 °C · cm<sup>2</sup>/W

**0.04** <sup>°C · cm<sup>2</sup>/W</sup>

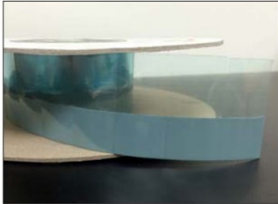
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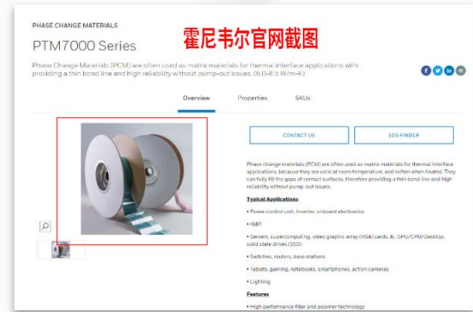


# PTM7950 Technical Information

Physical Properties	Unit	Test Method	PTM7950	PTM7950-SP
Thermal Conductivity	W/m-K	ASTM D5470	8.5	8.5
Thermal Impedance @ no shim	$^{\circ}\text{Ccm}^2/\text{W}$	ASTM D5470 Modified	0.04	0.04
Specific Gravity	$\text{g/cm}^3$	ASTM D374	2.8	2.5
Viscosity	$\text{Pa}\cdot\text{s}$ @ 2.10, /s, 25 $^{\circ}\text{C}$	Rheometer HON	NA	21
Volume Resistivity	$\Omega\text{cm}$	ASTM D257-700	$2.1 \times 10^{14}$	$2.1 \times 10^{14}$
Thickness Range	mm		.25	NA



PTM7950 pad format. It is also available in paste/ printable format.



LTM6300, PCM4SF, PTM5000, PTM6000, PTM6000HV, PTM7000, PTM7900, PTM7950

**FEATURES**

- High performance filler and polymer technology
- Phase change at 45  $^{\circ}\text{C}$
- Highly conductive filler loading to optimize performance
- Superior handling and reworkability
- Superior reliable thermal performance
- Range of thermal properties to fit different needs

**PCM PERFORMANCE**

**Theoretical Curve: PCM Viscosity vs. Temperature**

**Recommended Application**  
Clamping pressure and temperature are suggested to achieve a minimum bond line thickness, typically less than 1.5 mil (0.038mm) for best thermal performance.

**Storage & Use**  
Shelf Life: 12 months at 23 $\pm$ 2  $^{\circ}\text{C}$

**Availability**  
PCM material is available in both sheet and roll formats. Sheet/ printable (SP) material is available in 300cc syring equivalents.

Thickness Range: 0.2mm-1.0mm  
PTM7950 is only available in 0.25mm thickness  
Thickness tolerance:  $\pm 0.015\text{mm}$

PROPERTY DESCRIPTION	TYPICAL PROPERTIES				TEST METHOD
	LTM SERIES	PCM4SF SERIES	PTM5000 SERIES	PTM6000 SERIES*	
<b>Properties</b>					
Specific Gravity	1.8	2.2	2.3	2.3	ASTM D374
Thickness Range (mm)	NA	0.20-1.00	0.20-1.00	0.20-1.00	NA
<b>Thermal Properties</b>					
Thermal Conductivity (W/m-K)	1.8-2.4	2.0-2.5	3.5-4.5	3.5-4.5	ASTM D5470
Thermal Impedance @ no shim ( $^{\circ}\text{C}\cdot\text{cm}^2/\text{W}$ )	0.12-0.14	0.09-0.12	0.06-0.08	0.04-0.06	ASTM D5470 Modified
<b>Electrical Property</b>					
Volume Resistivity ( $\Omega\text{cm}$ )	$3.0 \times 10^{14}$	$8.2 \times 10^{14}$	$2.1 \times 10^{14}$	$2.1 \times 10^{14}$	ASTM D257

\*PTM6000 has higher reliability than PTM5000 series

## Short Description

Honeywell PTM7950 SP Super Highly Thermally Conductive PCM Pad

## Description

Honeywell PTM7950 Super Highly Thermally Conductive Phase Change Material (PCM) Paste Thermal Interface Materials

Honeywell's PTM7950 series, a super highly thermally conductive Phase Change Material (PCM) in both pad and paste formats, is designed to minimize thermal resistance at interfaces, maintain excellent performance through reliability testing, and provide scalable application at a competitive cost.

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.

A proprietary material provides superior reliability (pass 150 °C baking 1000 hours, T/C-B 1000 cycles) and maintains low thermal impedance (<0.04 °Ccm<sup>2</sup>/W @ no shim), making the PTM7950 series desirable for high performance integrated circuit devices.

## Features

LTM6300, PCM45F, PTM5000, PTM6000, PTM6000HV, PTM7000, PTM7900, PTM7950

**FEATURES**

- 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
- Range of thermal properties to fit different needs

**PCM PERFORMANCE**

**Theoretical Curve:  
PCM Viscosity vs. Temperature**

**Recommended Application**  
Clamping pressure and temperature are suggested to achieve a minimum bond line thickness, typically less than 1.5 mil (0.038mm) for best thermal performance.

**Storage & Use**  
Shelf Life: 12 months at 23±2 °C

**Availability**  
PCM material is available in both sheet and roll formats. Stencil printable (SP) material is available in 300cc syringes as well.

**Thickness Range: 0.2mm–1.0mm**  
(PTM7950 is only available in 0.25mm thickness)

Thickness tolerance: ±0.075mm

TYPICAL PROPERTIES						
PROPERTY DESCRIPTION	LTM SERIES	PCM45F SERIES	PTM5000 SERIES	PTM6000 SERIES*	PTM7000 SERIES	TEST METHOD
<b>Properties</b>						
Specific Gravity	1.8	2.2	2.3	2.3	2.7	ASTM D374
Thickness Range (mm)	NA	0.20-1.00	0.20-1.00	0.20-1.00	0.20-1.00	NA
<b>Thermal Properties</b>						
Thermal Conductivity (W/m-K)	1.8-2.4	2.0-2.5	3.5-4.5	3.5-4.5	6.0-8.5	ASTM D5470
Thermal Impedance @ no shim (°C-cm <sup>2</sup> /W)	0.12-0.14	0.09-0.12	0.06-0.08	0.06-0.08	0.04-0.06	ASTM D5470 Modified
<b>Electrical Property</b>						
Volume Resistivity (ohm-cm)	3.0×10 <sup>15</sup>	8.2×10 <sup>14</sup>	2.1×10 <sup>14</sup>	2.1×10 <sup>14</sup>	2.1×10 <sup>14</sup>	ASTM D257

\*PTM6000 has higher reliability than PTM5000 Series

Honeywell Thermal Interface Solutions (PTM7950 is only available in 0.25mm thickness)

PTM7900 Series Datasheet

Types

- Honeywell PTM7958-SP (Paste)
- Honeywell PTM7950-SP (Paste)
- Honeywell PTM7950 (Pad)

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

## Specifications

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- Color : Grey
- Thickness: 0.25mm (the optimal thickness for best performance)
- Thermal Resistance (cm<sup>2</sup>-K/W) : 0.04 °C·cm<sup>2</sup>/W
- Thermal Conductivity (W/m °K) : 8.5 W/m.K
- Specific Gravity : 2.8
- Volume Resistivity : 2.1x10<sup>14</sup> Ohms·cm

## Additional Information

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Brand	ModDIY
SKU	MDY-PTM7950-PAD
Weight	0.1000
TIM Type	Pad

## Product Options

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Size:	30mm x 20mm
	30mm x 30mm
	50mm x 31mm
	40mm x 40mm
	80mm x 40mm
	80mm x 80mm

