



# PCM20B

## Phase Change Material

Version 1.150318



### Phase Change Material

PCM20B phase change thermal interface materials are designed to fill air gaps and voids between heat sources and heatsinks, while at the same time displacing entrapped air between surfaces. PCM20B is a solid at room temperature for ease of manufacture and changes phase at the working temperature to give a low thermal impedance. PCM20B is available in a wide range of formats, such as standard sheets and custom die cuts depending on the end application.

### Features

- Naturally tacky and easy to use
- Low thermal resistance
- Long term reliability
- Good thermal conductivity
- Customized parts
- Maximize the contact area between surfaces

### Applications

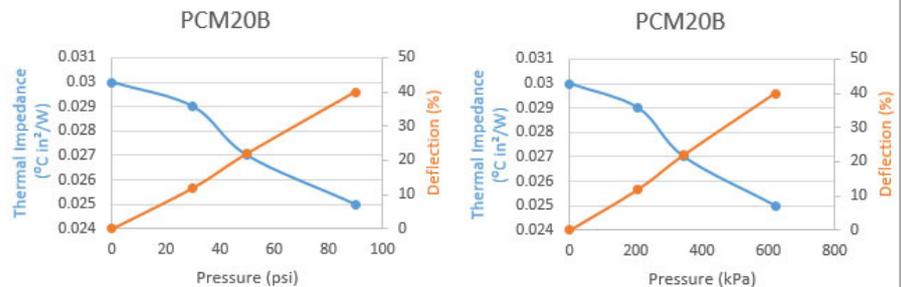
Electronic components: IC, CPU, MOS  
 LED, M/B, P/S, Heat Sink  
 LCD, TV, Notebook PC, PC Telecom Device, Wireless Hub, etc.  
 DDR II Module, DVD Applications, Hand-set applications, etc.

### Properties

- ✓ REACH Compliant
- ✓ ROHS Compliant

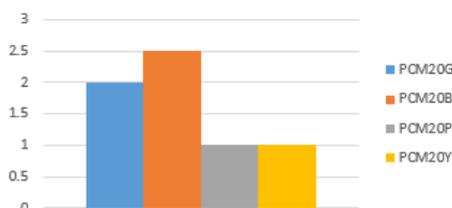
Property	PCM20B	Unit	Test Method
Colour	Black	-	-
Carrier	Aluminum foil	-	-
Thermal Conductivity	2.5	W/mK	ASTM D5470
Thermal Impedance	0.03	°C in <sup>2</sup> /W	ASTM D5470
Phase Changing Temperature	50 ~ 60	°C	-
Density	2.2	g/cm <sup>3</sup>	-
Thickness	0.18	mm	-
Storage temperature	< 40	°C	-
Operating Temperature	-45 ~ 125	°C	-
Shelf Life	24	Months	-

### Thermal Impedance vs Pressure vs Deflection



### Data

Thermal Conductivity (W / m K)



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\* Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.



# PCM20B

## Phase Change Material

### Standard Weights & Dimensional Tolerance

Size	Weight (gr)	
	Thickness (mm)	0.18
	150x150	8.91
	150x200	11.88
	300x400	47.52

\* All measurements in weights are in gr

\*\* All sizes are in mm

Die-Cut Thickness Tolerances	Thickness (mm)	Tolerance (mm)
	0.3	±0.03
	0.5	±0.05
	0.8	±0.08
	1.0	±0.1
	1.2	±0.12
	1.5	±0.15
	2.0	±0.2
	2.5 - 3.5	±0.25
	4.0 - 4.5	±0.3
	5.0	±0.35
	6.0 - 8.0	±0.4
	9.0	±0.45
	10.0	±0.5
>10.0	±0.5	

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