

## Keratherm Phase Change Materials: PCM 442



Kerafol's® Flowtherm® films are a combination of hot-melt waxes with or without a carrier material.

The wax mixture in Flowtherm® films melts at various temperatures depending on its dimensions thereby filling even the smallest irregularities between the power module and heat sink. This creates an improved contact between the surfaces and increases the heat transfer. Its special design makes it easy to use and store. Flowtherm® films are optionally available with single-side adhesive.

### APPLICATIONS

- Notebooks
- Desktop CPU's
- IGBT Units

DISCLAIMER: Purchaser shall be solely responsible for determining the adequacy of the product for any and all uses which the purchaser shall apply the product, and the application of the product by the purchaser shall not be subject to any implied warranty of fitness for that purpose.

Properties	symbol	unit	PCM 442
Color			black
Compound			filled hot-setting wax
<b>Thermal Properties</b>			
Thermal Resistance	$R_{th}$	K/W	0.02
Thermal Conductivity	$\lambda$	W/mK	4.0
<b>Electrical Properties</b>			
Dielectric Breakdown	$E_{d;ac}$	KV/mm	0.2
<b>Mechanical Properties</b>			
Overall Thickness ( $\pm 10\%$ )		mm	0.055*
Reinforcement			without
Wax Melt-on Temperature		°C	60
Continuous Operation Temperature		°C	+125

**\* - Optional thicknesses available!**

### Comparison of the Thermal Resistance of Different PCM's in Dependence on the Contact Pressure

