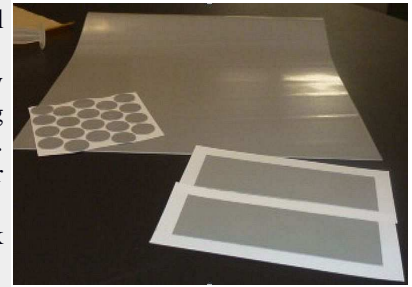


# TIM / New Phase Change Material / Xp45 Series

High Performance

The Xp45-W-series is cost-efficient, electrically non-insulating TIM change material enriched with a high-heat conductive filler, solvent-and silicone-free, high-performance. Through the development of this new and unique formulation, the interface is already providing a very efficient thermal transmission by phase change at normal operating temperatures, where a uniform connection line is maintained during the expansion process. With the result that air is efficiently expelled to the outside and any surface irregularities or flatness conditions-which are present across the interface-can be minimized. Only through efficient and reliable contact connection between heat generation and heat sink can an optimal thermal be carried out in the heatsink or the housing tray.



## PROPERTIES

Perfect thermal and mechanical contact, Silicone-free, Stable, no migrating, desiccation, evaporation. Only low tightening torque required. Easy cleaning by Isopropyl alcohol. Coating thickness warranted process unity and long term reliability. Solution for many types of surfaces. A better alternative of a thermal paste, a replacement of thermal grease / TIM on baseplate of insulated cases or packages

## AVAILABILITY

Standard Sheets 300x600 mm  
alter 400 x 600 /1000 mm  
Roll - dimension according to customer request specification  
Die cut parts, Formats on request. Material is not tacky  
Thickness 0,10 /0,20 /0,30 mm

## APPLICATION EXAMPLES

Heat transfer of microprocessors, LEDs, MOSFET, IGBT, Diode, Thyristor, Hybrid modules in electrical insulated discrete packages, modules. Modules without Cu base plates - Ceramic bases, thermally demanding, high frequency, traction drives inverters, power supplies, servo drive, battery units, UPS, etc.

Property	Unit	Xp45-W-10	Xp45-W-20	Xp45-W-30
Material		Phase change, Silicone free	Phase change, Silicone free	Phase change, Silicone free
Colour		Grey	Grey	Grey
Thickness :	mm	0,100	0,200	0,300
Thermal				
Thermal Conductivity	W / m*K	3,50	3,50	3,50
Thermal Resistance @ 100 PSI	°C-inch <sup>2</sup> /W	0,0064	0,0069	0,0076
T. Resistance / @ 40PSI / @ 10 PSI	°C-inch <sup>2</sup> /W	0,0087 / 0,0138	0,0093 / 0,0148	0,010 / 0,0158
Phase Change Temperature	°C	cca 45 / softens from 35°C	cca 45 / softens from 35°C	cca 45 / softens from 35°C
Operating Temperature	°C	from -40 °C to 140 °C	from -40 °C to 140 °C	from -40 °C to 140 °C
Max Storage Temperature	°C	35	35	35

Test Methods: 'ASTM D 5470. All data without warranty and subject to change. Please contact us for further data and information.

