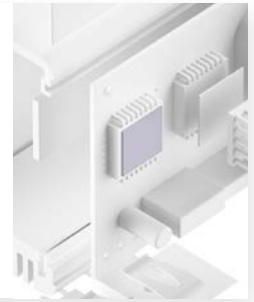


PHASE CHANGE TPC-W-PC

as stand alone or with substrate

TPC-W-PC is thermally conductive phase changing film optimising the thermal path e.g. between electronic packages and heat sinks. During warm-up the phase change compound starts filling up surface-specific roughnesses and unevennesses and expels any air enclosures from micro structures even at very low pressure. The material is available as TPC-W-PC as free standing film or with different substrates thus reworkability is improved since no compound residues remain on one side.



Release 12 / 2020

PROPERTIES

- ☐ Optimal thermal contact
- ☐ Thermal conductivity: 3.5 W/mK
- ☐ Silicone-free
- ☐ Ideal alternative and replacement of messy thermal grease
- ☐ Different optional substrates allow for one-side residue-freeness and improved reworkability

AVAILABILITY

- ☐ Sheet 305 x 152 mm
- ☐ Roll 356 mm (Liner 394 mm) x L (up to 150 m)
- ☐ TPC-WXXX-PC: Die cut parts between 2 release liners
- ☐ One-side coated substrates: Aluminum TPC-WXXX-PC-ALYYY Copper TPC-WXXX-PC-CUYYY

APPLICATION EXAMPLES

Thermal link of:

- ☐ MOSFETs or IGBTs
- ☐ Memory modules
- ☐ Power modules
- ☐ CPUs

For use in Servo drive control units / Computers / Automation appliances / Microelectronics

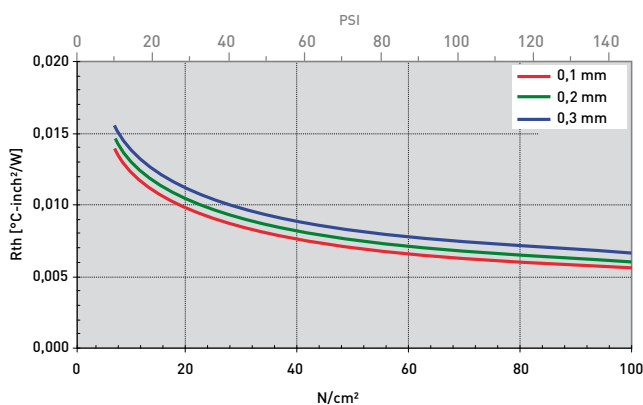
Technical Data Sheet

PROPERTY	UNIT	TPC-W100-PC	TPC-W200-PC	TPC-W300-PC
MATERIAL		Phase Change Film	Phase Change Film	Phase Change Film
Colour		Grey	Grey	Grey
Total Thickness	mm	0.1 ±0.02	0.2 ±0.03	0.3 ±0.03
Specific Density	g/cm³	2.0	2.0	2.0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance¹ @ 150 PSI	°C-inch²/W	0.0056	0.0061	0.0067
Resistance¹ @ 30 PSI	°C-inch²/W	0.0097	0.0103	0.0111
Resistance¹ @ 10 PSI	°C-inch²/W	0.0138	0.0148	0.0158
Thermal Conductivity	W/mK	3.5	3.5	3.5
Phase Change Temperature	°C	ca. 45	ca. 45	ca. 45
Storage	Months	24	24	24
Max. Storage Temperature	°C	27	27	27

Measurement technique according to: 'ASTM D 5470. Typical, non-binding values. Not intended for specification purposes. Subject to technical changes. Please contact us for further information.

Thicknesses: 0.1 mm / 0.2 mm / 0.3 mm / 0.4 mm

Rth vs. N/cm² (PSI)



All technical data and information are without warranty and believed to be reliable and accurate corresponding to the latest state of the art. Since the products are not provided to conform with mutually agreed specifications and their use and processing are unknown we cannot guarantee results, freedom from patent infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of changes.