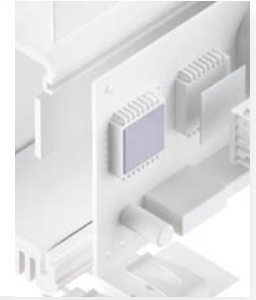


# PHASE CHANGE TPC-W-PC

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 unevenesses and expels any air enclosures from micro structures even at very low pressure. The particular formulation and the thixotropic nature prevents from run-out as well as migration. 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 03 / 2020

### PROPERTIES

- Optimal thermal contact
- Thermal conductivity: 3.5 W/mK
- Silicone-free
- No migrating, pump-out or run out due to thixotropic properties
- Ideal alternative and replacement of messy thermal grease
- Different optional substrates allow for one-side residue-freeness and improved reworkability

### AVAILABILITY

- Sheet 356 x 305 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

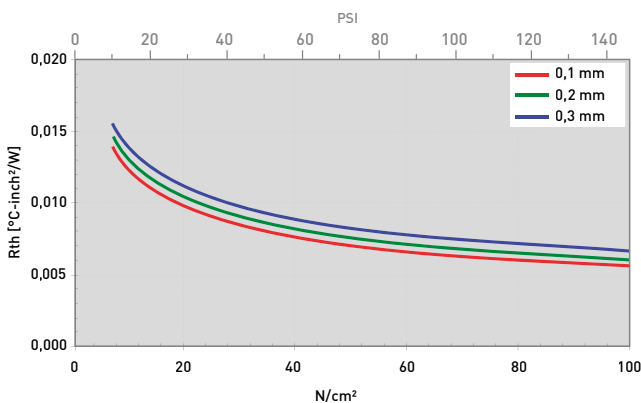
Technical Data Sheet

PROPERTY	UNIT	TPC-W100-PC	TPC-W200-PC	TPC-W300-PC
<b>MATERIAL</b>				
MATERIAL		Phase Change Film	Phase Change Film	Phase Change Film
Colour		Grey	Grey	Grey
Total Thickness	mm	0.1 <sup>+0.12</sup> <sub>-0.08</sub>	0.2 <sup>+0.23</sup> <sub>-0.17</sub>	0.3 <sup>+0.33</sup> <sub>-0.27</sub>
Specific Density	g/cm <sup>3</sup>	2.0	2.0	2.0
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
<b>THERMAL</b>				
Resistance <sup>1</sup> @ 150 PSI	°C-inch <sup>2</sup> /W	0.0056	0.0061	0.0067
Resistance <sup>1</sup> @ 30 PSI	°C-inch <sup>2</sup> /W	0.0097	0.0103	0.0111
Resistance <sup>1</sup> @ 10 PSI	°C-inch <sup>2</sup> /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. All data without warranty and subject to change. Please contact us for further data and information.

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

Rth vs. N/cm<sup>2</sup> (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.