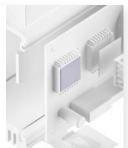
PHASE CHANGE TPC-W-PC

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 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

Technical Data Sheet

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

| 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 | | | | |
| Resistance ¹ @ 150 PSI | °C-inch²/W | 0.0056 | 0.0061 | 0.0067 |
| Resistance ¹ @ 30 PSI | °C-inch²/W | 0.0097 | 0.0103 | 0.0111 |
| Resistance ¹ @ 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 |

 $Measurement \, technique \, according \, to: \, 'ASTM \, D \, 5470. \, All \, data \, without \, warranty \, and \, subject \, to \, change. \, Please \, contact \, us \, for \, further \, data \, and \, information. \, and \, change \, chang$

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

