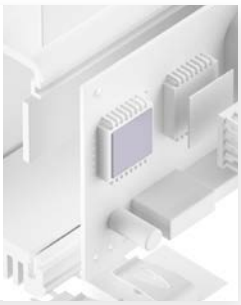
PHASE CHANGE TPC-Y-PC

as stand alone or with substrate

TPC-Y-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-Y-PC as free standing film or with different substrates thus reworkability is improved since no compound residues remain on one side.



PROPERTIES

- Optimal thermal contact
- Thermal conductivity: 5.0 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 355 x 152 mm
- TPC-YXXX-PC: Die cut parts between 2 release liners

APPLICATION EXAMPLES

Thermal link of:

- MOSFETs or IGBTs
- Memory modules
- Modules / Heat Pipe Assemblies
- CPUs

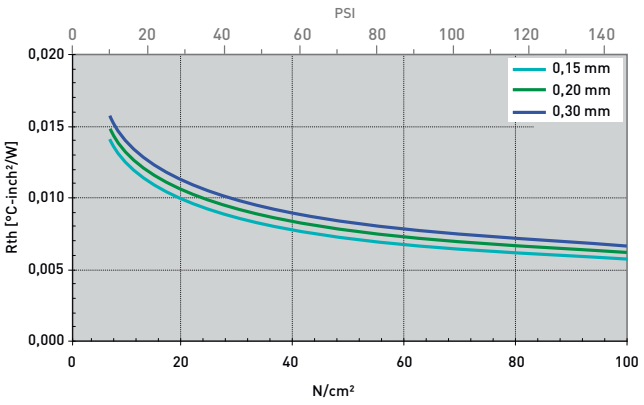
For use in Servo drive control units / Computers / Automation appliances / Microelectronics

PROPERTY	UNIT	TPC-Y150-PC	TPC-Y200-PC	TPC-Y300-PC
MATERIAL		Phase Change Film	Phase Change Film	Phase Change Film
Colour		Grey	Grey	Grey
Total Thickness	mm	0.15 $^{\pm 0.02}$	0.2 $^{\pm 0.03}$	0.3 $^{\pm 0.03}$
RoHS Conformity	2015 / 863 / EU	Yes	Yes	Yes
THERMAL				
Resistance[1] @ 150 PSI	°C-inch²/W	0.0056	0.0060	0.0066
Resistance[1] @ 30 PSI	°C-inch²/W	0.0095	0.0102	0.0110
Resistance[1] @ 10 PSI	°C-inch²/W	0.0130	0.0147	0.0155
Thermal Conductivity	W/mK	5.0	5.0	5.0
Phase Change Temperature	°C	ca. 45	ca. 45	ca. 45
Operating Temperature Range	°C	max. 125	max. 125	max. 125
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: 0.15 mm / 0.2 mm / 0.3 mm

Rth vs. N/cm² (PSI)



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