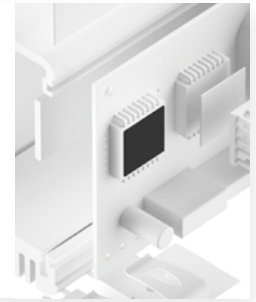


ALU FILM/PHASE CHANGE TPC-T-AL-CB



phase change coating

TPC-T-AL-CB is an aluminum film which is coated with a thermally conductive phase changing compound on both sides thus optimising the thermal path e.g. between electronic packages and heat sinks. During warm-up the phase change coating starts filling up surface-specific roughnesses and unevennesses and expels any air enclosures from micro structures even at low pressure. The wetting of the contact areas is further on improved by volumetric material expansion at increasing temperature. Thus the total thermal resistance is minimised. The particular formulation and the thixotropic nature prevents from run-out, dry-up as well as migration. The aluminum carrier effects high mechanical stability and easy handling.



Release 03 / 2020

PROPERTIES

- Optimal thermal contact
- Silicone-free
- No migrating, run out, pump-out due to thixotropic properties
- Process reliable coating thickness
- Ideal alternative and replacement of messy thermal grease

AVAILABILITY

- Sheet 445 x 500 mm
- Roll 445 mm x 152 m
- Non tacky (TPC-TXXX-AL-CB)
- Die cut parts

APPLICATION EXAMPLES

Thermal link of:

- MOSFETs or IGBTs
- Insulated diodes
- Power modules
- CPUs

For use in Servo drive control units / Traction drives / Automation appliances / Microelectronics

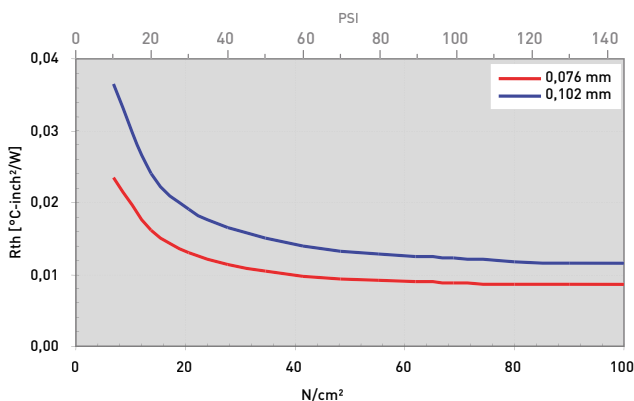
Technical Data Sheet

PROPERTY	UNIT	TPC-T076-AL-CB	TPC-T102-AL-CB
MATERIAL			
		Aluminum with graphite filled phase change coating on both sides	Aluminum with graphite filled phase change coating on both sides
Colour		Black	Black
Thickness Aluminum	µm	51 ^{+0.09} _{-0.07}	51 ^{+0.12} _{-0.09}
Thickness Phase Change (per side)	µm	12.5	25.5
Total Thickness	µm	76	102
RoHS Conformity	2015 / 863 / EU	Yes	Yes
THERMAL			
Resistance ¹ @ 150 PSI	°C-inch ² /W	0.009	0.011
Resistance ¹ @ 30 PSI	°C-inch ² /W	0.013	0.019
Resistance ¹ @ 10 PSI	°C-inch ² /W	0.022	0.037
Phase Change Temperature	°C	ca. 52	ca. 52

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

Phase Change coatings per side: 12.5 µm / 25.5 µm
 Total Thicknesses: 76 µm / 102 µm

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.