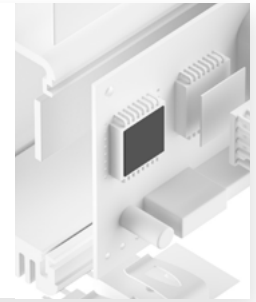


# PYROLYTIC GRAPHITE FOIL TFO-ZS-PG



soft, anisotropic highly conductive

TFO-ZS-PG consists of pure soft pyrolytic graphite. Due to the synthetic structure it shows a high anisotropic heat spreading conductivity in-plane (x-y-plane) and an outstanding thermal conductivity in through thickness direction (z-direction). Its flexibility and softness allow for a very good compliance to larger uneven contact surfaces such as IGBT base plates. Thus the total thermal resistance is minimised. Compared to copper or aluminum the material is ideal for applications where low weight is required. The very high temperature resistance allows for the use in extreme hot environments.



Release 02 / 2024

### PROPERTIES

- Maximum contact through good surface compliance
- Very soft
- Very low weight
- Silicone-free
- Extremely temperature resistant
- EMI-shielding through high electrical conductivity

### AVAILABILITY

- Sheet 180 x 180 mm
- Die cut parts

### APPLICATION EXAMPLES

Thermal link of:

- IGBT modules
- Laser diodes
- TEC modules
- High flux LEDs

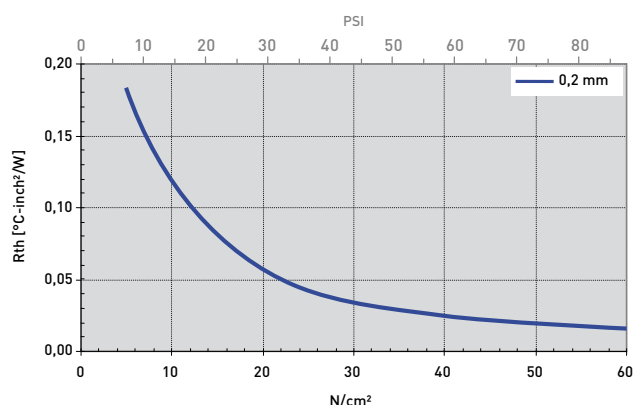
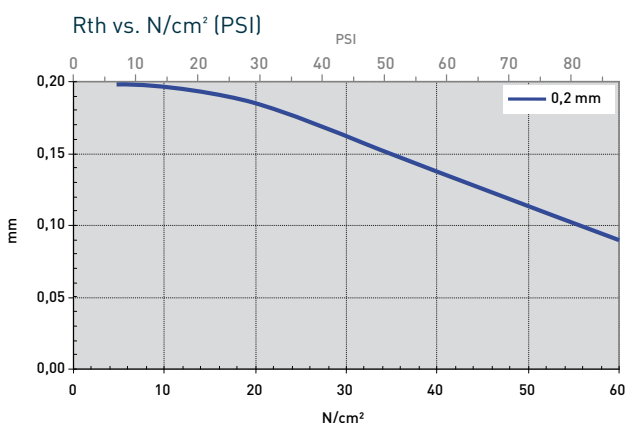
For use in liquid cold plates / high end computers / Analyzers / Photonics / LED arrays

Technical Data Sheet

PROPERTY	UNIT	TFO-ZS200-PG
<b>MATERIAL</b>		
Colour		Grey
Thickness	mm	0.2 ±0.05
Density	g/cm³	0.5
Flammability	UL 94	V0
RoHS Conformity	2015 / 863 / EU	Yes
<b>THERMAL</b>		
Resistance¹ @ 90 PSI @ Thickness	°C-inch²/W (mm)	0.015 (0.09)
Resistance¹ @ 30 PSI @ Thickness	°C-inch²/W (mm)	0.055 (0.18)
Resistance¹ @ 10 PSI @ Thickness	°C-inch²/W (mm)	0.181 (0.19)
Thermal Conductivity (Z Direction)	W/mK	30
Thermal Conductivity (X-Y Direction)	W/mK	500
Operating Temperature Range	°C	- 250 to + 400
<b>ELECTRICAL</b>		
Electrical Conductivity	S/cm	10,000

Measurement technique according to: 'ASTM D 5470. All data without warranty and subject to change. Please contact us for further data and information. Shelf life adhesive: 6 months when stored in original packaging at room temperature and 50% relative humidity.

Thicknesses: 0.20 mm



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.