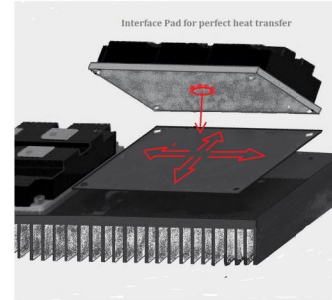


Natural Graphite Foil - EC800

anisotropic

EC800 consists of more than 97% pure natural graphite. Due to the flake-like shape they show anisotropic thermal conductivities in-plane (x-y-plane) and in through direction (z-direction). Their softness allows for a good compliance to the contact surfaces. The tapes can be with thermally conductive acrylic pressure sensitive adhesive. The adhesive improves processing over standard flexible graphite and provides a high bond strength to a mating surface.

Their low densities make them ideal for applications where low weight is required. Wide operating temperature allows for the use in extreme hot environments. Long life time – does not evaporate, harden, good handling, cutting and easy storing



PROPERTIES	AVAILABILITY	APPLICATION EXAMPLES
Maximum contact through good surface compliance Very low weight, Silicone-free Very high temperature resistance EMI-shielding through high electrical conductivity	Non adhesive Sheet 300 x 500 mm, One side adhesive Sheet – on request One side adhesive tapes – 120mm, + on request Roll 0,5m x 100 m - standard Die cut parts, Pads in base plates formats of insulating modules, Hockey-Puk semiconductors	Thermal link, Heat transfer of MOSFET, IGBT modules Diode, Thyristor, Hybrid modules Insulated Power modules, CPUs For use in UPS, Traction drives inverters, Power supplies, etc.

Property	Unit	EC802	EC805	EC810
Material		Natural Graphite 97%	Natural Graphite 97%	Natural Graphite 97%
Colour		Grey – Metallic Black	Grey – Metallic Black	Grey – Metallic Black
Thickness :	mm	0,070	0,125	0,250
Thermal				
Thermal Resistance @ 100 PSI	°C-inch ² /W	0,09	0,14	0,23
Thermal Conductivity Z Direction / (X-Y Direction)	W/m.K	8 / (140)	8 / (140)	8 / (140)
Volume Resistivity in x-y Direction (surface)	Ω-cm	11,0 x 10 ⁻⁴	11,0 x 10 ⁻⁴	11,0 x 10 ⁻⁴
Adhesion to Aluminium (dwell time)	lb/in ² 20 min.	6,7	6,7	6,7
Operating Temperature Range	°C	- 250 to 400	- 250 to 400	- 250 to 400

Test Methods: ASTM D 5470. All data without warranty and subject to change. Please contact us for further data and information.

Graphite Thickness: 0,050 / 0,070 / 0,125 / 0,25 / 0,51mm

Thickness of therm. conductive acrylic adhesive: 0.025mm

Hardness: 85 according Shore A

Tensile Strench: 650psi

Silicon Free – Yes

Electrical conductive – Yes / non insulated !!!!

RoHS Conformity – Yes

Dielectric Constant: < 0,001 @ 1 MHz

UL Flammability: UL 94 V-0

Adhesive Version of Tape

