# **\*EC360GRAPHITE-2**

#### **Thermal Pad Series**

EC360® GRAPHITE-2 introduces highly conductive thermal pads made from natural graphite, the ideal alternative to high-end thermal pastes. The graphite layer is ultra thin with a thickness of just 0.05 mm Paired with an unmatched thermal conductivity of 450 W/mK on the X-Y axis and 20 W/mK on the Z axis, it makes it the perfect thermal interface material. While thermal paste requires a lot of practice for applying the correct amount and spreading it evenly, installing a graphite sheet is easy. It comes thinner than any thermal paste can be spread and at the same time is more conductive, just place it and

install the heatsink. Furthermore, it is highly durable, as it does not contain any liquids it virtually lasts forever. It can not dry out, does not need to be reapplied and will not degrade over time. Additionally it does not leave a messy surface, is easy to remove and can even be reused. Please note, while it is safe to apply, it must be handled with caution. As graphite is electrically conductive, take special care that it does not get in contact with electric components and avoid short-circuits. The graphite sheet can be conveniently cut using a scissor, which allows trimming to the perfect size for any surface.

## **Types and Configurations**

Thickness*	Available sizes*
0.05 mm	30x30 mm, 40x40 mm, 100x100 mm

<sup>\*</sup> Custom configurations are available upon request, for worldwide industrial inquiries please contact us at: <a href="mailto:sales@extremecool360.com">sales@extremecool360.com</a>

## **Technical Properties**

Properties	Unit	Value	Test method
Color	-	Grey	Visual
Thermal Conductivity (X-Y)	W/mK	450.0	ASTM D5470
Thermal Conductivity (Z)	W/mK	20.0	ASTM D5470
Thermal Resistance	°C-in2/W	0.08	ASTM D5470
Specific Gravity	g / cm³	1.5	ASTM D 792
Hardness	Shore A	85	ASTM D 2240
Tensile Strength	psi	650	ASTM D 412
Conductivity (Electrolytic)	s/cm	19000	ASTM D 257
Usable Temperatures	°C	-40 - 400	EN 344
Flame Rating	-	VO	UL 94

### **Installation Recommendation**

- Clean surfaces from dirt and other possible residue. If applicable, isopropyl 90% alcohol is recommended to ensure a clean surface.
- Place the thermal pad on the chip.
- Once it is positioned, install the heatsink.



**Disclaimer** Properties of the products may be revised due to changes in the manufacturing process. The property values in this document are not guaranteed. This product is made of silicone, this means silicone oil may exude from the product and low molecular siloxane may vaporize depending on operating conditions. This product is designed and manufactured for general industrial use only. Never use this product for medical, surgical purposes and/or other purposes. Never use this product for the purpose of implantation and/or other purposes by which a part of the product remains in the human body. Before using safety must be evaluated and verified by the purchaser. Contents described in the document do not guarantee performances and qualities required for the purchaser's specific purposes. Statements concerning possible or suggested uses made herein may not be relied upon.