

## **Thermal Pad Series**

The EC360® SILVER series presents the mid-range variant of high-performance thermal pads, which are on eye-level with premium thermal pastes. The pads have a very high thermal conductivity of 12 W/mK and are suitable for a variety of applications including CPUs and GPUs (that are cooled by thermal pads), memory chips and other electrical components. They perform particularly well for water cooling systems, as the pads have a putty like consistency, which means that they will deform and adapt permanently to the surface they are

applied to and will not spring back into their original shape. The slight adhesion of the pads allows for easy positioning. It is the perfect solution for heat-transfer in adverse surface conditions when the use of thermal paste is unsuitable. Handling is particularly safe, as the pads are electrically isolating and there is no risk of short-circuiting. Additionally, they can easily be cut using a scissor, which allows trimming to the perfect size for any surface.

## **Cross-section view**

#### Thin PET film (removable)

Silicon Pad	Timi (Temovable)
	Silicon Pad

PET film (removable)

A full silicone pad covered with a PET film on both contact surfaces for increased stability and easy installation. Both are to be removed for installation.

# **Types and Configurations**

Thickness*	Available sizes*		
0.5 mm / 0.02 "	50x50 mm, 100x100 mm, 200x200 mm		
1.0 mm / 0.04 "	50x50 mm, 100x100 mm, 200x200 mm		
1.5 mm / 0.06 "	50x50 mm, 100x100 mm, 200x200 mm		
2.0 mm / 0.08 "	50x50 mm, 100x100 mm, 200x200 mm		
3.0 mm / 0.12 "	50x50 mm, 100x100 mm, 200x200 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	W/mK	12.0	ASTM D5470
Specific Gravity	g / cm³	2.2	ASTM D 792
Hardness	Shore C	20	ASTM D 2240
Tensile Strength	psi	782	ASTM D 412
Volume Impedance	Ohm-cm	2.9 x10 <sup>11</sup>	ASTM D 257
Breakdown Voltage	kV/mm	6.0	ASTM D 149
Usable Temperatures	°C	-40 - 220	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.
- Remove one of the protective layers and place the exposed side of the thermal pad facing the surface of the chip. Once
  positioned gently press on it to make it stick.
- Remove the second protective layer and 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.