

# **SCHLEGEL** electronic materials

a member of **CMEI Group** 

**OP-8500** 

THERMALLY CONDUCTIVE GAP FILLER

#### Features and Benefits

- 3.0W/m-K thermal conductivity
- Good compressibility
- Naturally tacky
- Electrically isolating
- RoHS compliant
- Halogen-free

OP-8500 offers improved thermal performance and conformability. This material conforms to surface irregularities under low application pressures. It is electrically non-conductive and naturally tacky. Additional adhesive is generally not required.

The proprietary formulation of OP-8500 is RoHS compliant and halogen-free, providing extra reassurance in applications where hazardous substances are forbidden.

Properties	OP-8500 Series	Test Method
Construction & Composition	Soft silicone elastomer	
Color	Violet	Visual
Thickness Range /inch (mm)	0.01"~0.40" (0.254~10.16) in 0.01" (0.254) increments	
Standard Sheet Size	12" x 16"	
Density /g.cm <sup>-3</sup>	2.98	
Hardness /Shore 00	40	ASTM D2240
Tensile Strength /psi	34	ASTM D412
UL Flammability Rating	UL94 V0	E109346
Temperature Range /°C	<b>-40~200</b> ℃	$\pm$
Thermal Conductivity W.m <sup>-1</sup> .K <sup>-1</sup>	3.0	ASTM D5470 (modified)
Breakdown Voltage /V	>6000 (Thickness ≤ 0.04") >10000 (Thickness ≥ 0.05")	ASTM D149
Volume Resistivity /ohm.cm	8.0 x 10 <sup>13</sup>	ASTM D257
Dielectric Constant @ 1MHz	12.4	ASTM D150
Shelf Life /Months	24	

**Product Code and Descriptions** 

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Carrier Treatment	Criteria	
Fiber Glass (FG)	Compulsory for ≤ 0.03" (0.75mm)	
Rubberized Cloth (RC)	Not Recommended	
Pressure Sensitive Adhesive (PSA)	Optional to all thickness	
Detachable Adhesive (DA)	Optional to ≥ 0.039" (1.0mm)	
Aluminum Foil (AL)	Not Recommended	
Kapton (PI)	Not Recommended	
Talc treatment (DAT)	Optional to all thickness	

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Thickness (mil)

00 = Custom thickness 04 = 40mil 85 = 8500 Series OP = OpTIM<sup>™</sup> gap filler

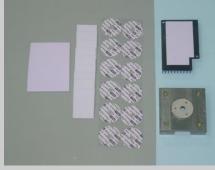
Dimensions SS = Standard sheet size CD = Custom dimensions

**Release Liner** 

ST = Standard OT = Other PSA A1 = One side A2 = Both sides OT = Other

Carrier FG = Fiberglass CB = Combination OT = Other

Specifications and appearances may change without notice. All statements, technical information and recommendations herein are based on tests that we believed to be reliable, but the accuracy and completeness are not guaranteed. Before using, user should determine the suitability of the product for its intended use, and the user assumes all risks and liabilities whatsoever in connection therewith. Neither the seller nor the manufacturer shall be liable for any loss or damage, direct, incidental or consequential, including loss of profits or revenues arising from the use or inability to use the product. Any statements or recommendations shall have no effect unless contained in an agreement signed by authorized personnel of the seller and manufacturer.



### **Typical Applications**

- Cooling component to the chassis, frame, or other type of heat spreader Mass storage device
- Heat pipe assemblies RDRAM memory modules
- Motor control
- Telecommunication hardware

## **Optional Configurations**

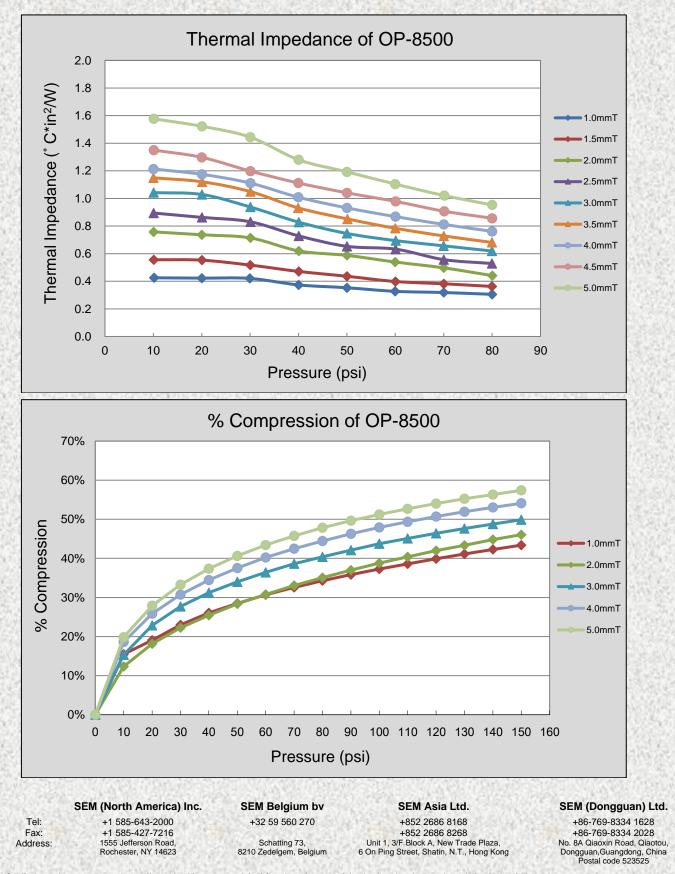
Can be die-cut into specific dimensions





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