

SCHLEGEL OP-8500 Spec 07

electronic materials

THERMALLY CONDUCTIVE GAP FILLER

Features and Benefits

- Superior thermal performance
- 3.5 W/m-K thermal conductivity
- Electrically isolatingRoHS compliant
- KOHS COMplian
- Halogen-free



Typical Applications

- Notebook Computers
- Handheld Portable Electronics
- Micro Heat Pipe assemblies
- Micro Processors, Memory Chips and Graphic Processors
- Motor Control
- Wireless Communication Hardware

Optional Configurations

Can be die-cut into other dimensions

OP-8500 Spec 07 offers good 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 Spec 07 is RoHS compliant and halogen-free, providing extra reassurance in applications where hazardous substances are forbidden.

Properties	OP-8500 Spec 07	Test Method
Construction & Composition	Soft silicone elastomer	1 <u>+</u> 1.26
Color	Violet	Visual
Thickness Range /inch (mm)	0.02"~0.40" (0.508~10.16) in 0.01" (0.254) increments	
Standard Sheet Size	12" x 16"	-
Density /g.cm ⁻³	3.0	100 m
Hardness /Shore 00	35	ASTM D2240
Tensile Strength /psi	34	ASTM D412
UL Flammability Rating	UL94 V0	
Temperature Range /°C	-40° ℃ ~200° ℃	
Thermal Conductivity/W.m ⁻¹ .K ⁻¹	3.5	ASTM D5470 (modified)
Breakdown Voltage /V	>4000 (Thickness = 0.02~0.04") >6000 (Thickness ≥ 0.04")	ASTM D149
Volume Resistivity /ohm.cm	8.3 x 10 ¹³	ASTM D257
Dielectric Constant @ 1000Hz	8.0	ASTM D150
Shelf Life /Months	24	San State

Carrier Treatment	Criteria	
Fiber Glass (FG)	Compulsory for ≤ 0.02" (0.5mm)	
Rubberized Cloth (RC)	Not Recommended	
Pressure Sensitive Adhesive (PSA)	Not Recommended	
Detachable Adhesive (DA)	Optional to ≥ 0.039" (1.0mm)	
Aluminum Foil (AL)	Optional to ≥ 0.039" (1.0mm)	
Kapton (PI)	Not Recommended	
Talc treatment (DAT)	Optional to all thickness	

Product Code and Descriptions

<u>OP 85 XX</u> Spec 07 -XX -XX -XX -XX Dimensions SS = Standard sheet size Release Liner ST = Standard OT = Other PSA A1 = One side A2 = Both sides OT = Other Carrier FG = Fiberglass AL = Aluminum foil CB = Combination OT = Other Spec 07 = Special Derivative # Thickness (mil) 00 = Custom thickness 00 = Custo 04 = 40mil 85 = 8500 Series OP = OPTIM[™] gap filler SEM Asia Ltd. **SEM Belgium bv** SEM (Dongguan) Ltd. +86-769-8334 1628 +852 2686 8168

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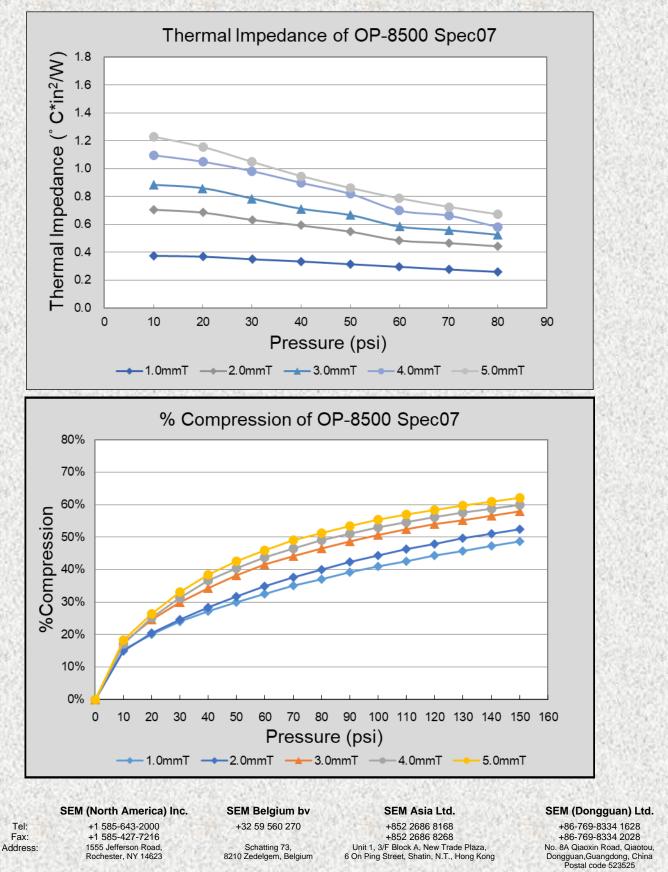
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