

### THERMALLY CONDUCTIVE INSULATOR

#### Features and Benefits

- Smooth and compliant surface
- · Electrically isolating
- RoHS compliant
- Sheet form, roll form and die-cut options

# Typical Applications

- Power supplies
- Automotive electronics
- Motor controls
- Power semiconductors

## **Optional Configurations**

• Can be die-cut into specific dimensions

The OI-1000 is a series of thermally conductive material with electrical isolation property. It is especially suitable for applications where low mounting pressures for component clamping is required e.g. low component clamping forces for discrete semiconductors mounted with spring clips for a speedy assembling process.

The smooth and compliant surface characteristics of OI-1000 materials can minimize interfacial thermal resistance and maximize thermal performance for such applications. OI-1000 is ROHS compliant, offering extra reassurance in applications where hazardous substances are forbidden.

Properties	OI-1000 Series	Test Method
Construction & Composition	Reinforced ceramic-filled silicone elastomer	<del>-</del>
Color	Grey, Green, Yellow	_
Thickness	0.01~0.018" (0.254~0.457)	<u>-</u>
Specific gravity (g/cm³)	> 1.6	ASTM D297
Hardness (Shore A)	70 ± 5	ASTM D2240
Tensile Strength (kgf/cm²)	> 180	ASTM D412
Dielectric Strength (kV/mm)	> 6	ASTM D149
Thermal Conductivity (W/m-K)	1.2	ASTM D5470 (modified)
Breakdown Voltage /kV	>6.5kV (Thickness ≥0.25mm) >14.5kV (Thickness ≥0.50mm)	ASTM D149
Volume Resistivity /ohm.cm	6.2 x 10 <sup>14</sup>	ASTM D257
Temperature Range (°C)	-40~240	
Flammability Rating	Compliant with UL standards	

Please contact us for other special requirements

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

#### SEM (North America) Inc.

Tel: Address:

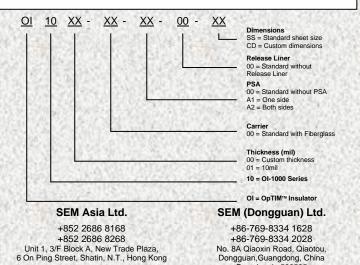
+1 585-643-2000 +1 585-427-7216 1555 Jefferson Road, Rochester, NY 14623

#### **SEM Belgium bv**

+32 59 560 270

Schatting 73 8210 Zedelgem, Belgium

## **Product Code and Descriptions**



No. 8A Qiaoxin Road, Qiaotou.

Dongguan, Guangdong, China Postal code 523525

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