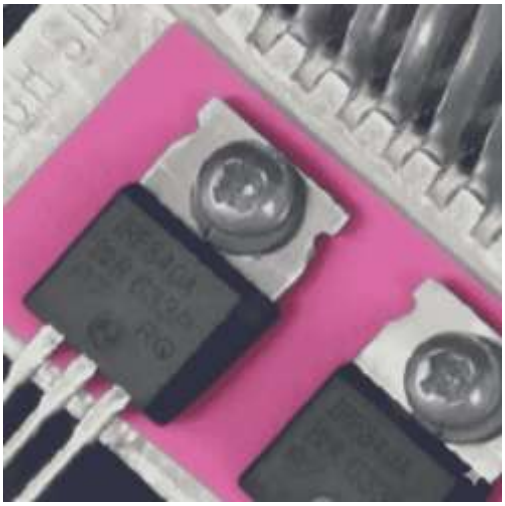
GBA

Thermal Conductive Insulator

EB-series 1.5 – 5.0 W/mK



Product Highlights

- Thermally conductive insulator made from glass fiber cloth or PI film.
- Offers good heat transfer, insulation, and puncture resistance.
- Available in sheets (305×305 mm) or rolls (305 mm×76 m).
- Optional single-sided adhesive for easy assembly.
- Custom shapes available; ideal for filling large gaps with other thermal materials.

Applications

- Power amplifiers
- Power supplies
- LED lamps
- Automotive electronics
- Battery power management

The EB series is a high-performance material that is both electrically insulating and thermally conductive, designed to meet the heat dissipation and voltage requirements of modern electronic components. Made from glass fiber or polyimide (PI) film, it provides excellent puncture resistance, protecting against damage from screws or other components during installation and use.

The material has a thin, soft conformal coating on its surface, creating an excellent contact layer for installation and minimizing interfacial thermal resistance. This makes it well-suited for applications requiring both electrical insulation and efficient heat dissipation.

The EB series offers multiple thermal conductivity options, making it suitable for a broad range of applications. It can also be die-cut into custom shapes to meet specific design requirements, providing versatility and easy integration into electronic assemblies.

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Specifications Table

Parameters	Units of Measure	EB15P-FG-T019	EB15Y-PI-T015	EB35W-FG	EB50W-FG	Test Method
Colour		Pink	Tan	White	White	Visual
Thickness	mm	0.19	0.15	0.23/0.30/ 0.38/0.50	0.25/0.50	ASTM D374
Reinforcement Layer		Fiberglass	PI Film	Fiberglass	Fiberglass	
Thermal Conductivity	W/m·K	1.5	1.5	3.5	5	ASTM D5470
Thermal Resistance @50psi	°C·in²/W	0.45	0.42	0.30@0.23mm	0.21@40PSI,0.25mm	ASTMD5470
	°C·cm²/W	2.9	2.71	1.94@0.23mm	1.35@40PSI,0.25mm	
Hardness	Shore A	86	90	90	75	ASTM D2240
Flammability Rating		V0	V0	V0	V0	UL94
Breakdown Voltage	KV AC	>6	>6	>4.0 @0.23mm	>4.0 @0.25mm	ASTM D149
Volume Resistivity	Q·cm	9.6×10^{12}	$\geq1.0\times10^{12}$	$\geq1.1\times10^{12}$	$\geq1.1\times10^{15}$	ASTM D257
Tensile Strength	MPa	7.8KPSI	35	5KPSI	≥18	ASTMD412
Elongation	0	10	40	5	5	ASTMD412
Dielectric Constant	@1MHz	5.5	3.9	4	4.1	ASTMD150
Operating Temperature	°C	-60~+180	-60~+180	-60~+180	-60~+200	GBA
RoHS		YES	YES	YES	YES	GBA