

PRODUCT DESCRIPTION

The TgardTM 200 is a high-performance interface pad. Consisting of a silicone/boron nitride composite, these fiberglass-reinforced pads are used when the lowest thermal resistance and highest dielectric strength are required.

A high-tear, cut-through and puncture-resistant product, the TgardTM 200 is tough and strong. Burrs cause no problems for the material and the pad will not dry out, crack, or fail when pressured between mating parts.

FEATURES & BENEFITS

- High thermal Conductivity of 5.0 W/mK
- High breakdown voltage of > 6,000 volts
- Resistant to tears and punctures
- UL® 94 V0 rated

APPLICATIONS

- Automotive control units
- General high-pressure interfaces
- Power conversion equipment
- Power semiconductors (To packages, MOSFETs and IGBTs)



PROPERTY	TEST METHOD	Tgard TM 210B	Tgard TM 220	Tgard TM 230
Construction		Supported	Supported	Supported
Supporting material		Fiberglass	Fiberglass	Fiberglass
Color	visual	White	Blue	Green
Density		1.51g/cc	1.45 g/cc	1.47 g/cc
Electrical Properties				
Dielectric breakdown Voltage 50mm probe	ASTM D149	6,000 volts AC	9000 volts AC	10000 volts AC
Volume resistivity (ohm-cm)	ASTM D257	1.2x10 ¹⁵	5x10 ¹³	5.0x10 ¹³
Dielectric constant @1Mhz	ASTM D3380	3.03	3.32	3.32
Typical Properties				
Thickness		0.01" (0.25mm)	0.02" (0.51mm)	0.03" (0.75mm)
Thermal Resistance (@100PSI)	ASTM D5470	0.25°C-in2/W	0.39°C-in2/W	0.45°C-in2/W
Thermal conductivity	ASTM D5470 (modified)	5.0W/mk	5.0W/mk	5.0W/mk
Hardness (Shore A)	ASTM D2240	80	80	80
Operating temperature range		-60C to 200C	-60C to 200C	-60C to 200C
UL flammability rating	UL 94	V-0	V-1	Not rated

Configurations available: Sheet form and die-cut parts

Standard options: Request no adhesive with "A0" suffix. Request adhesive on one side with "A1" suffix. Double-sided adhesive is not available.

Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.

USA: +1.866.928.8181

Europe: +49.8031.24600

Asia: +86.755.2714.1166

www.laird.com

