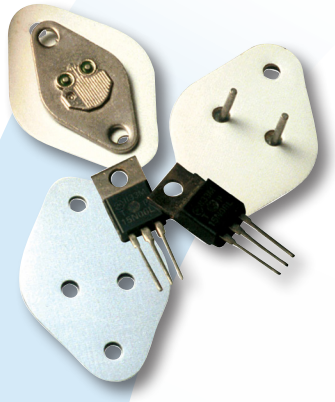
Laird™

Smart Technology. Delivered.

Tgard™ 200 Series
Thermally Conductive Insulators



HIGH PERFORMANCE THERMAL INTERFACE PRODUCTS

The Tgard™ 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 Tgard™ 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.

The Tgard™ 200 is available in the following sizes:

0.010" (0.25 mm) die cut shapes only
0.020" (0.51 mm) sheets and die cut shapes
0.030" (0.75 mm) sheets and die cut shapes

FEATURES AND 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

- Audio and video components
- Automotive control units
- General high pressure interfaces
- Motor controllers
- Power conversion equipment
- Power semiconductors
  - T0 packages, M0SFETs and IGBTs

Americas: +1.800.843.4556
Europe: +49.8031.2460.0
Asia: +86.755.2714.1166

CLV-customerservice@lairdtech.com
www.lairdtech.com/thermal

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	TGARD™ 210	TGARD™ 220	TGARD™ 230	TEST METHOD
Construction & Composition	Reinforced boron nitride filled silcone elastomer	Reinforced boron nitride filled silcone elastomer	Reinforced boron nitride filled silcone elastomer	
Color	White	Blue	Green	Visual
Thickness	0.010" (0.25mm)	0.020" (0.51mm)	0.030" (0.76mm)	
Thickness tolerance	±0.002" (±0.05mm)	±0.002" (±0.05mm)	±0.003" (±0.075mm)	
Specific Gravity (Density)	1.52 g/cc	1.45 g/cc	1.47 g/cc	Helium Pycnometer
Hardness	85 Shore A	80 Shore A	80 Shore A	ASTM D2240
Tensile Strength	N/A	N/A	N/A	ASTM D412
% Elongation	N/A	N/A	N/A	ASTM D412
Outgassing TML (Post Cured)	0.06%	0.06%	0.06%	ASTM E595
Outgassing CVCM (Post Cured)	0.05%	0.05%	0.05%	ASTM E595
UL Flammability Rating	94 V0	94 V1	Not Rated	E180840
Temperature Range	-60°C to 200°C	-60°C to 200°C	-60°C to 200°C	
Thermal Conductivity	5 W/mK	5 W/mK	5 W/mK	ASTM D5470 (modified)
Thermal Impedance @ 100 psi @ 689 KPa	0.18°C-in²/W 1.17°C-cm²/W	0.35°C-in²/W 2.26°C-cm²/W	0.40°C-in²/W 2.28°C-cm²/W	ASTM D5470 (modified)
Breakdown Voltage	6,000 VAC	10,000 VAC	20,000 VAC	ASTM D149
Volume Resistivity	$5x10^{13}$ ohm-cm	$5x10^{13}$ ohm-cm	$5x10^{13}$ ohm-cm	ASTM D257
Dielectric Constant @ 1 MHz	3.32	3.32	3.32	ASTM D150

Standard thicknesses:	0.010" (0.25 mm) die cut shapes only, 0.020" (0.51 mm), 0.030" (0.76 mm)
Standard sheet sizes:	0.020" and 0.030": 16" x 16" (406 mm x 406 mm) Individual die-cut shapes can be supplied.
Pressure sensitive adhesive:	Request no adhesive with "AO" suffix. Request adhesive on one side with "A1" suffix. Double-sided adhesive is not available.
Reinforcement:	Tgard™ 200 sheets are fiberglass reinforced.

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

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Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

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Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9