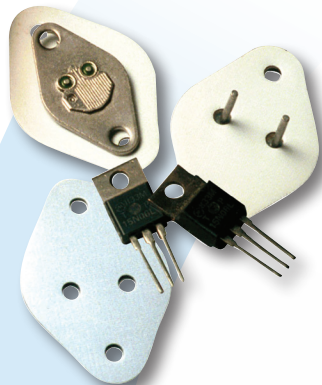




#### **LOW COST, MEDIUM PERFORMANCE INSULATOR MATERIAL**

The Tgard™ 20 is designed to solve over heating issues such as lower component efficiency, premature component failures, size limitations and other performance problems for today's computer power supplies.

The Tgard™ 20 is a film-based product designed to resist cut through in screw mounting applications while providing a more consistent breakdown voltage over other insulator constructions.

The phase change coating on the film core provides an excellent mating surface for low pressure clip mounting applications.

#### **PERFORMANCE CAPABILITIES**

- High dielectric breakdown of 9,000 volts
- Film base resistance cut through
- Thermal resistance of 0.60°C-in<sup>2</sup>/ watt @ 25 psi pressure

#### **FEATURES AND BENEFITS**

- Reinforced with moderate temperature resistant film
- High voltage resistant film
- Total thermal resistance of 3.4°C/watt on TO-220
- Non-blocking for ease of use
- Designed for computer power supplies

#### **APPLICATIONS**

- Switching mode power supplies for:
  - Computers
  - Consumer electronics
- UPS units

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| PROPERTY                     | TEST METHOD | METRIC VALUES            | IMPERIAL VALUES          |
|------------------------------|-------------|--------------------------|--------------------------|
| ELECTRICAL PROPERTIES        |             |                          |                          |
| Dielectric Withstand Voltage | ASTM D149   | 4,500 volts DC           | 4,500 volts DC           |
| Dielectric Breakdown Voltage | ASTM D149   | >9,000 volts AC          | >9,000 volts AC          |
| Volume Resistivity           | ASTM D257   | >10 <sup>12</sup> ohm-cm | >10 <sup>12</sup> ohm-in |
| Dielectric Constant @ 1 MHz  | ASTM D257   | 1,8                      | 1.8                      |
| MECHANICAL PROPERTIES        |             |                          |                          |
| Thickness                    |             | 0,076 mm                 | 0.003 inch               |
| Substrate Film Thickness     |             | 0,051 mm                 | 0.002 inch               |
| Tensile Strength             | ASTM D412   | 138 MPa                  | 20 kpsi                  |
| Elongation                   | ASTM D412   | 130%                     | 130%                     |
| Operating Temperature Range  |             | -40 - 150°C              | -40 - 302°F              |
| Color                        |             | White                    | White                    |
| UL Flammability Rating       | UL 94       | V0                       | V0                       |

| PRESSURE, PSI (KPA)      | UNITS                    | 10 (69) | 25 (172) | 50 (345) | 100 (689) | 200 (1379) |
|--------------------------|--------------------------|---------|----------|----------|-----------|------------|
| TOTAL THERMAL RESISTANCE |                          |         |          |          |           |            |
| Modified ASTM D5470      | °C-in <sup>2</sup> /watt | 0.65    | 0.60     | 0.60     | 0.60      | 0.60       |
| Modified ASTM D5470      | °C-cm <sup>2</sup> /watt | 4,2     | 3,9      | 3,9      | 3,9       | 3,9        |
| TO-220                   | °C/watt                  | 3.8     | 3.4      | 3.4      | 3.4       | 3.4        |

|                     |                                    |                                                 |
|---------------------|------------------------------------|-------------------------------------------------|
| STANDARD THICKNESS: | STANDARD ROLL SIZE:                | DIE-CUT PARTS:                                  |
| 3 mils (0,076 mm)   | 12" x 300'<br>(304 mm x 91 meters) | Standard and custom<br>configurations available |

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

THR-DS-TGARD-20 032515

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<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

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