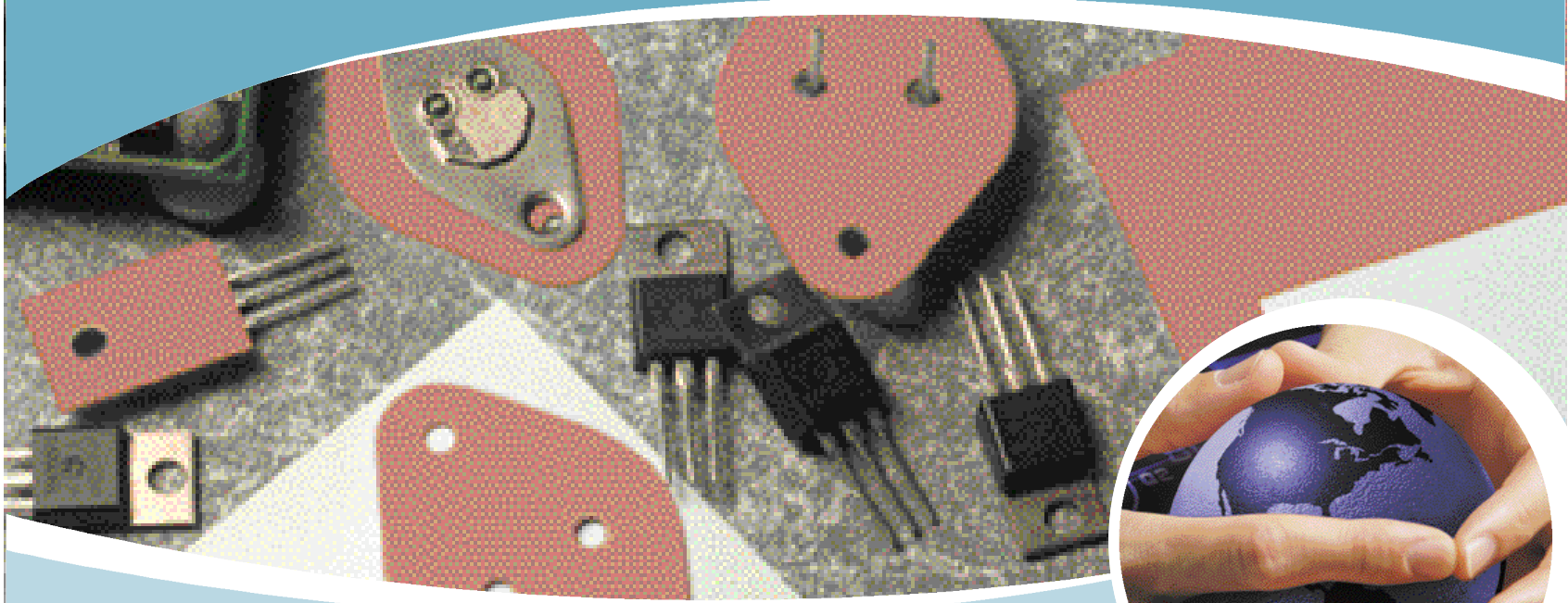




T-gard™ 500



global solutions :
local support™

T-gard™ 500

Thicker Thermal Insulator Pad Prevents Electrical Shorts in Automotive Electronics Applications

T-gard™ 500 is a medium thermal performance insulator pad consisting of a ceramic filled high temperature silicone rubber coated on electrical grade fiberglass.

T-gard™ 500 is designed for applications that require additional thickness to prevent electrical shorts from stamped aluminum heatsinks used in switching mode power supplies (SMPS) and debris from aluminum castings used in automotive motor controls.

T-gard™ 500 is used in applications that require interface of 2.5°C/watt or higher on a TO-220 mounted @ 50 psi pressure.

Thermally Conductive Insulator Features and Benefits:

- High dielectric strength of >6,000 volts AC
- Thermal resistance of 0.45°C-in²/watt at 50 psi
- Thermal resistance of 0.35°C-in²/watt at 400 psi
- Thick enough to encapsulate burrs of stamped heatsinks

Applications:

- Automotive motor controls
- Switching mode power supplies
 - Stamped aluminum heatsinks

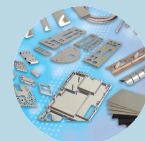
For sales information:

In the USA please telephone +1-888-246-9050

In Europe please telephone +44-(0)-1342-315044

In Asia please telephone +86-755-2714-1166

or visit: www.lairdtech.com



engineered emi, antenna and thermal applications



T-gard™ 500

Electrical Properties

| Properties | Test Method | Metric Values | Imperial Values |
|-----------------------------------|-------------|--------------------------|--------------------------|
| Dielectric with stand voltage | ASTM D149 | 4,500 volts AC | 4,500 volts AC |
| Dielectric Breakdown voltage | ASTM D149 | >6,000 volts AC | >6,000 volts AC |
| Volume Resistivity | ASTM D257 | >10 ¹² ohm-cm | >10 ¹² ohm-in |
| Dielectric Constant @ 1 MHz | ASTM D257 | 3.3 | 3.3 |
| Electrical RTI Temperature rating | UL 746D | 150°C | 302°F |

Total Thermal Resistance

| Pressure, psi (kPa) | Units | 10 (69) | 25 (172) | 50 (345) | 100 (689) | 200 (1379) | 400 (2758) |
|---------------------|--------------------------|---------|----------|----------|-----------|------------|------------|
| Modified ASTM D5470 | °C-in ² /watt | 0.6 | 0.55 | 0.45 | 0.40 | 0.35 | 0.35 |
| Modified ASTM D5470 | °C-cm ² /watt | 3.9 | 3.2 | 2.9 | 2.6 | 2.3 | 2.3 |
| TO-220 | °C/watt | 2.9 | 2.6 | 2.4 | 2.2 | 2.0 | 2.0 |

Mechanical Properties

| Properties | Test Method | Metric Values | Imperial Values |
|-----------------------------------|-------------|---------------|-----------------|
| Thickness | | 0.23 mm | 0.009 inch |
| Hardness | ASTM D2240 | 85 Shore A | 85 Shore A |
| Tensile Strength | ASTM D412 | 1.3 kpsi | 9 mPa |
| Elongation @45° to Warp/Fill | ASTM D412 | 20% | 20% |
| Elongation along width or length | ASTM D412 | 5% | 5% |
| Mechanical RTI Temperature rating | UL 746D | 150°C | 302°F |
| Color | | Dark Pink | Dark Pink |
| UL Flammability Rating | UL 94 | V-0 | V-0 |

| | |
|------------------------------|--|
| Standard Thickness: | 9 mils (0.229 mm) |
| Standard Roll Size: | 18" x 164' (457 mm x 50 meters) |
| Die Cut Parts: | Standard and custom configurations available |
| Pressure Sensitive Adhesive: | Single side adhesive available on request |

Our customers are reminded that they bear the responsibility for testing Laird Technologies' materials for their proposed use. Any information furnished by Laird Technologies and its agents is believed to be accurate and reliable, but our customers must bear all responsibility for the use and application of Laird Technologies' materials since Laird Technologies' and its agents cannot be aware of all potential uses. Laird Technologies makes no warranties as to the fitness, merchantability, or suitability of any Laird Technologies' materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies' products are sold pursuant to the Laird Technologies' domestic terms and conditions of sale in effect from time to time, a copy of which will be furnished upon request. A15173-00

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Thermal Interface Products](#) category:

Click to view products by [Laird](#) manufacturer:

Other Similar products are found below :

[7721-9PPS](#) [FGN80-2](#) [PFM-172-60](#) [A-40](#) [9601-7](#) [5300AC](#) [1.500G](#) [017177](#) [08133](#) [TVQF-1225-07S](#) [TP0001](#) [4860](#) [V6516C](#) [A17653-20](#)
[A17536-07](#) [A17775-05](#) [A17633-03](#) [TA-1.75](#) [30195](#) [3223-07AC-34](#) [3223-07AC-51](#) [V6516A](#) [U021041-32-U1](#) [A17752-05](#) [MC32680](#)
[7952MP \(610MM X 914 MM\)](#) [7717-46NG](#) [VC-106-70-3](#) [AL-225-175](#) [A12780-01](#) [A17084-07](#) [A15295-13](#) [70-841-031](#) [2403289](#) [2403290](#)
[A16820-27](#) [2190548](#) [TCF 2000 AF](#) [01884.9-00](#) [SC100-W40](#) [SC1000-W1SS](#) [SC80-W2B](#) [30190](#) [30198](#) [MC-099/127](#) [CS-054/088](#) [CS-](#)
[116/138](#) [CS-138/210](#) [CS-143/188](#) [CS-B-01](#) [CS-C](#)