

**Brady Tsoft3S-80 Thermally Conductive Material Gap Filler**

TDS No. BT-8623  
Effective Date: 08/03/2011

**Description:**

**GENERAL**

**Colour:** Grey with pink backing  
**Binder:** Silicone  
**Filler:** Aluminium Oxide and Boron Nitride  
**Reinforcement:** Fiberglass

TSOFT3S-80 is a soft material designed to conduct heat away from uneven surfaces. It is firmer and more thermally conductive than our TSOFT series. The conformability allows for intimate contact over rough surfaces and eliminates air.

**APPLICATION**

Tsoft® materials are thermally conductive insulators typically mounted between a transistor and a heat sink offering low thermal resistance as well as electrical insulation. Tsoft® materials do not require thermal grease. Using Tsoft® materials can lead to dramatic production cost reductions and improved product uniformity eliminating messy grease mica application, contamination, mica cracking, silicone migration and drying out.

Some of the common applications would include:

- Computer system and telecommunication peripherals
- Power conversion
- Transfer heat from ICs/PCBA/motor to heat sink, chassis or heat spreader
- Automotive electronics

**REGULATORY/AGENCY APPROVALS**

**RoHS:** BT-8623 (Tsoft3S-80) is RoHS compliant in accordance to the EU Directive 2002/95/EC and its amendments.

**Details:**

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL RESULTS
Thickness	ASTM D374	80mil (2.0mm)
Specific Gravity	ASTM D792	2.2 g/cm <sup>3</sup>
Hardness (Shore OO)	ASTM D2240	60
<b>ELECTRICAL PROPERTIES</b>		
Dielectric Constant, 60Hz	ASTM D150	5.1
Volume Resistivity	ASTM D257	1.0 E+14 Ohm.cm
Dissipation Factor, 60Hz	ASTM D150	0.08
Dielectric Strength	ASTM D149 type1	20KVolts
<b>THERMAL PROPERTIES</b>		
Thermal Conductivity @10psi	ASTM D5470	2.0W/mK
Continuous Use Temperature	MIL-1-49456A	-60C to 200C
Weight Loss, 24hrs @ 200C	-	<1%
Thermal Impedance @10psi	ASTM D5470	3.0°C.In <sup>2</sup> /Watt

**Available Forms:**

Tsoft® thermal management materials are available in roll form, sheet form, standard and special configurations.

**Trademarks:**

ASTM: American Society for Testing and Materials (U.S.A.)  
UL: Underwriters Laboratories Inc. (U.S.A.)

**Note:** All values shown are averages and should not be used for specification purposes.

Test data and test results contained in this document are for general information only and shall not be relied upon by Brady customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact Brady for further information.

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## **WARRANTY**

Brady products are sold with the understanding that the buyers will test them in actual use and determine for themselves their adaptability to their intended uses. Brady warrants to the buyers that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the product shown to Brady's satisfaction to have been defective at the time Brady sold it. This warranty does not extend to any persons obtaining the product from the buyers. This warranty is in lieu of any other warranty, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and of any other obligations or liability on Brady's part. Under no circumstances will Brady be liable for any loss, damage, expense, or consequential damages of any kind arising in connection with the use, or inability to use, Brady's products.

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Brady Asia | 1 Kaki Bukit Crescent | Singapore 416236 | Singapore | Tel: 65 6477.7261 | Fax: 65 6748.7248