

Brady Tsoft3-80 Thermally Conductive Material Gap Filler

TDS No. BT-8613

Effective Date: 07/04/2010

Description:
GENERAL
Colour: Gray
Binder: Silicone
Filler: Aluminium Oxide
Liner: Clear PET

TSOFT3-80 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.

REGULATORY/AGENCY APPROVALS

UL: BT-8613 (Tsoft3-80) is QMFZ2 recognised and V-0 rated as per UL94 standard. See UL file E316839 for specific details. **RoHS:** BT-8613 (Tsoft3-80) is RoHS compliant in accordance to the EU Directive 2002/95/EC and its amendments.

Halogen-free: BT-8613 (Tsoft3-80) is halogen-free in accordance to definition in IEC61249-2-21 and IPC-4101B, tested using

IPC-TM-650.

Details:

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL RESULTS
Thickness	ASTM D374	80mil (2mm)
Specific Gravity	ASTM D792	2.2 g/cm ³
Hardness (Shore OO)	ASTM D2240	55
ELECTRICAL PROPERTIES		
Dielectric Constant, 60Hz	ASTM D150	5.5
Volume Resistivity	ASTM D257	1.0 E+14 Ohm.cm
Dissipation factor, 100kHz	ASTM D150	0.08
Dielectric Strength	ASTM D149 type1	22KVolts
THERMAL PROPERTIES		
Thermal Conductivity	ASTM D5470	2.3W/mK @10psi
Continuous Use Temperature	MIL-1-49456A	-60C to 200C
Weight Loss, 24hrs@200C	-	1%
Thermal Impedance	ASTM D5470	2.35°C.ln ² /Watt @10psi

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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