

Brady Tsoft-100 Thermally Conductive Material Gap Filler

TDS No. BT-8605
Effective Date: 07/04/2010

Description:

GENERAL

Colour: Ice blue with gray backing
Binder: Silicone
Filler: Aluminium Oxide
Liner: Clear PE
Reinforcement: Fiberglass polyester

Tsoft® TSOFT-100 is a soft material designed to conduct heat away from uneven surfaces. The conformability allows for intimate contact over rough surfaces and eliminates air. Tsoft® materials are available in various thicknesses.

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-8605 (Tsoft-100) is QMFZ2 recognised and V-0 rated as per UL94 standard. See UL file E316839 for specific details.
RoHS: BT-8605 (Tsoft-100) 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	100mil (2.5mm)
Specific Gravity	ASTM D792	2.3 g/cm ³
Hardness (Shore A)	ASTM D2240	15
Elongation, minimum	ASTM D828	3%
ELECTRICAL PROPERTIES		
Dielectric Strength	ASTM D149 (Type 1)	10 KVolts
Volume Resistivity	ASTM D257	2.5 E+13 Ohm.cm
Dielectric Constant, 60Hz	ASTM D150	5.5
Dissipation Factor, 60Hz	ASTM D150	0.0039
THERMAL PROPERTIES		
Thermal Conductivity @ 10psi	ASTM E1530 (modified ASTM D5470)	1.0 W/mK
Thermal Impedance @ 10psi	ASTM D5470	3.9 C-in ² /Wattt
Continuous Use Temperature	MIL-I-49546A	-60°C to 200°C
Weight Loss, 24 hrs @ 200 C	-	< 1%

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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