

Silicone Thermal Transfer Insulator Pad Fabrics: Fiberglass reinforced and polyimide reinforced -150°F to 400°F / -100°C to 204°C: DeltaGlass™



- Type 4500 fabric was designed for LED and Power semiconductor applications for maximum reliability.
- Fiberglass core or Kapton® core.
- This material resists heat, humidity and shock.
- Conforms to surface topography, maximizing contact area for uniform heat transfer.
- UL94 V-0 flame rating.
- 150°C RTI (Relative Thermal Index).
- Halogen free, RoHS compliant.
- Formulated for superior heat transfer characteristics.

Thermal Transfer Insulator Pad Fabric – Fiberglass core		
Property	Typical Value	Test Method
Color	Mauve or Gray	Visual Inspection
Thickness	7 to 20 mils / 0.18 – 0.51mm	ASTM D374
Construction	Supported	N/A
Supporting Material	Fiberglass	N/A
Hardness	77 Shore A	ASTM D2240
Tensile Strength	850 PSI / 5.9 MPa	ASTM D412
Elongation, machine direction	4%	ASTM D412
Elongation, 45 Warp and Fill	20%	ASTM D412
Thermal Conductivity	0.87 btu/(hr*in*F) / 1.5 W/m-K	ASTM D5470
Thermal Impedance @ 40 PSI	0.3 in ² * C/W / 1.9e ⁻⁴ m ² * K/W	ASTM D5470
Glass Transition Temperature	-180F / -118C	ASTM D3418
Operating Range	-150 to 400F / -100 to 204C	N/A
Dielectric Strength, kVac	> 500 V/mil / > 19 kV/mm	ASTM D149
Flammability Rating	V-0	UL 94
RTI, Mechanical	300F / 150C	UL 746
RTI, Electrical	300F / 150C	UL 746
Hot Wire Ignition (HWI)	4 @ 7 mils / 3 @ 20 mils 4 @ 0.17mm / 3 @ 0.51mm	UL 746
High Current Arc Ignition (HAI)	3 @ 7 mils / 2 @ 20 mils 3 @ 0.17mm / 2 @ 0.51mm	UL746

Thermal Transfer Insulator Pad Fabric – Kapton® core		
Property	Typical Value	Test Method
Color	Mauve	Visual Inspection
Thickness	6 to 7.5 mils / 0.15 – 0.19mm	ASTM D374
Construction	Supported	N/A
Supporting Material	Kapton® MT, 1 mil	N/A
Hardness	77 Shore A	ASTM D2240
Elastic Modulus (< or = 1% strain)	38,900 PSI / 268 MPa	ABTG TMS A1
Shear Modulus (< or = 25% strain)	145 PSI / 1.0 MPa	ASTM D412
Elongation, 45 Warp and Fill	20%	ASTM D1002
Thermal Conductivity	0.87 btu/(hr*ft*F) / 1.5 W/m-K	ASTM D5470
Thermal Impedance @ 40 PSI	0.27 in ² * C/W / 1.8e ⁻⁴ m ² * K/W	ASTM D5470
Glass Transition Temperature	-180°F / -118°C	ASTM D3418
Operating Range	-150 to 400°F / -100 to 204°C	N/A
Dielectric Strength, kVac	> 1000 V/mil / > 39 kV/mm	ASTM D149
Flammability Rating	V-0	UL 94
RTI, Mechanical	300°F / 150°C	UL 746
RTI, Electrical	300°F / 150°C	UL 746
Hot Wire Ignition (HWI)	3	UL 746
High Current Arc Ignition (HAI)	2	UL746

Thermal Transfer Insulator Pad Fabrics 16” roll width – 125 yards roll length Custom die cutting service available		
Part Number	Thickness, in.	Substrate
F-FG-SR-4500-XX	.007 to .020	Fiberglass
F-KAP-SR-4500-XX	.006 to .0075	Kapton®

- The “XX” value is thickness measured in mils.

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Fiberglass Reinforced Silicone Rubber Sheet – AMS3320 & AMS3315

500°F / 260°C: FlameShield™ - High Temperature, Heat & Flame Resistant

Hot process protection



- Used as a gasket material due to excellent dimensional stability.
- Used as an expansion joint material.
- Resistant to weathering and engine oil.
- Thicknesses of .032", .062", .093", .125", & .250". 36" and 48" roll widths.
- Resistant to weld splatter, grinding sparks, solder drips, brazing.
- Tensile 1300 psi.
- Fibreglass layer: 20x18 weave. .014" thickness. 12.5 oz/yd².
- Meets AMS3320 & AMS3315 for baffle sealing.
- Rolls lengths vary during production – please call for availability.
- Available slit into tapes for engine baffle use or precision cut to size for round, square or special shape gaskets.

FlameShield™ High Temperature Fibreglass Reinforced Silicone Rubber Sheet Meets AMS3320 & AMS3315 Specifications

Part Number	Durometer	Roll Width	Thickness in / mm
F-FGSR70-AMS-36-032-X	70	36"	1/32" / .032" / 0.79
F-FGSR70-AMS-36-062-X	70	36"	1/16" / .062" / 1.57
F-FGSR70-AMS-48-062-X	70	48"	1/16" / .062" / 1.57
F-FGSR70-AMS-36-093-X	70	36"	3/32" / .093" / 2.36
F-FGSR70-AMS-36-125-X	70	36"	1/8" / .125" / 3.18
F-FGSR70-AMS-48-125-X	70	48"	1/8" / .125" / 3.18
F-FGSR70-AMS-36-250-X	70	36"	¼" / .250" / 6.35

- For the "X" value, specify length in yards.
 - Minimum order is 2 yards

These materials can be easily used to make shields and covers that are assembled with mechanical fasteners. Easily punched or drilled for installation of grommets, or insertion of sheet metal screws or bolts.

Can be easily slit by hand with a straight edge and knife into tapes for fitting engine baffles by hand. Rolls can also be machine slit.

The edges of this material may be sealed with liquid silicone or paste in order to seal the fiber ends to prevent wicking of liquids or contamination. See our part numbers US-ESD (liquid silicone) and US-ESP (paste silicone).