



Adhesive Films and Preforms

31 Dunham Road
Billerica, MA 01821

Toll Free: (888) 832-4345
Fax: (978) 670-4956

Email: info@techfilm.com
www.techfilm.com

TF T2781F THERMALLY CONDUCTIVE FILM

Description:

TechFilm T2781F is a high performance, highly thermally conductive\electrically insulating, B-staged film adhesive. It features a fast cure time, high thermal conductivity and good adhesion to various substrates. It also features good chemical, heat, and moisture resistance. TechFilm T2781F will cure at temperatures above 100°C.

Shelf Life: (Stored in dry conditions)

Two days @ 20°C Two weeks @ -10°C Two months @ -20°C One year @ -40°C

Cure Schedules:

Cure Schedule	15 minutes at 165°C	
Alternate Cure Schedules	30 minutes at 150°C	120 minutes at 110°C
	10 minutes at 175°C	180 minutes at 100°C

Cured Properties:

<u>Property</u>	<u>Method</u>	<u>Value Obtained</u>
Color	Visual	Grey
Tensile Shear Strength to Gold at 25°C, psi	ASTM D1002	1200
Tensile Shear Strength to 101 Copper at 25°C, psi	ASTM D1002 ¹	2600
Tensile Shear Strength to Aluminum at 25°C, psi	ASTM D1002	2500
Tensile Shear Strength to 260 Brass at 25°C, psi	ASTM D1002 ¹	1430
Tensile Shear Strength to 316 SS at 25°C, psi	ASTM D1002 ¹	1110
Tensile Shear Strength to FR4 at 25°C, psi	ASTM D1002 ¹	1400
Glass Transition, DSC, °C	ASTM E1356	101
Specific Heat Capacity, J/g-°K	ASTM E1461	1.06
Thermal diffusivity, cm ² /s-°K	ASTM E1461	0.13
Thermal Conductivity, W/M-°K	ASTM E1461	2.63
Volume Resistivity, Ohm-cm at 25°C	ASTM D257	1.9 x 10 ⁷
Weight Loss at 150°C, TGA, 20°C/min, N ₂ , %	ASTM D3850	0.07
at 200°C	and MIL-STD-883	0.27
at 250°C	Section 3.8.5.1	0.59
at 300°C		0.75

1 – Tested using 0.188” thick substrates.

All values reported above are typical values from the recommended cure, and are reported as a means of reference. Individual testing should be done to determine actual results, tested at specific conditions. Data should not be used for material specification purposes.

Rev 070507-PLC

TechFilm LLC
Telephone: (888) 832-4345

31 Dunham Road, Billerica, MA 01821
FAX (978) 670-4956