

TF T2781F

THERMALLY CONDUCTIVE FILM

TECHNICAL DATA

June, 2010

Product Description

TechFilm T2781F is a high performance, high 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 100C.

APPLICATIONS	FEATURES	RECOMMENDED SUBSTRATES
<ul style="list-style-type: none"> Heat Sinks 	<ul style="list-style-type: none"> High thermal conductivity Electrically insulating Fast cure time Chemical, heat, moisture resistant 	<ul style="list-style-type: none"> Various

CURED PROPERTIES*		
Property	Value	Test Method
Color	Grey	Visual
Glass Transition, DSC, C	101	ASTM E1356
Specific Heat Capacity, J/g-K	1.06	ASTM E1461
Thermal Diffusivity, (cm ²)/s-K	0.13	ASTM E1461
Thermal Conductivity, W/M-K	2.63	ASTM E1461
Volume Resistivity, Ohm-cm @25C	1.9 x 10 ⁷	ASTM D257
Weight Loss, TGA, 20C/min, N ₂ , %	@ 150C, 0.07	ASTM D3850, MIL-STD-883 Section 3.8.5.1
	@ 200C, 0.27	
	@ 250C, 0.59	
	@ 300C, 0.75	

TENSILE SHEAR STRENGTH, 25C, psi*		
Property	Value	Test Method
to Gold	1200	ASTM D1002
to 101 Copper, 0.188" thick	2600	ASTM D1002
to Aluminum, 0.188" thick	2500	ASTM D1002
to 260 Brass, 0.188" thick	1430	ASTM D1002
to 316 SS, 0.188" thick	1110	ASTM D1002
to FR4, 0.188" thick	1400	ASTM D1002

CURE SCHEDULE*		
Property	Value	Test Method
Cure Time @ 165C, min	15	Typical Cure Schedule
Cure Time @ 175C, min	10	Alternate Cure Schedule
Cure Time @ 150C, min	30	Alternate Cure Schedule
Cure Time @ 110C, min	120	Alternate Cure Schedule
Cure Time @ 100C, min	180	Alternate Cure Schedule

Storage: Store in dry conditions, out of sunlight and in tightly sealed containers.
Shelf Life: Two days @ 20C Two weeks @ -10C Two months @ -20C One year @ -40C

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Resin Designs, LLC 11 State Street Woburn, MA 01801 www.resindesigns.com P 781-935-3133 F 781-935-3144

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