

Devinall™ TH

HIGH MODULUS POLYIMIDE THERMAL FILMS

Thermally Conductive Solution

Technical Data Sheet

Welcome to the world of Devinall Polyimide Films. Our Devinall Series of Polyimide Films were specifically developed as a high performance polyimide superior to existing polyimide films. Devinall has been developed over the past 3 years by Fastel Adhesive Products in order to provide customers with cost effective polyimide solutions through *direct from manufacturer* capabilities and reliable dielectric and insulating characteristics.

Our Devinall TH & THB Series of Polyimide Films are designed with 4 times the thermal conductivity properties and cut thru strength than our standard Devinall SP Series. These enhanced characteristics allow Devinall TH & THB to be a viable solution for an array of applications including dielectric/insulating thermal interface materials, insulating layer/shim, heat management and insulation within electronics assembly, printed circuit boards, automotive applications (due to its resistance to handling and wear). Devinall TH & THB offer reliable thermal transfer and high dielectric strength when cooling of a non-insulated device is required.



**Multiple Thicknesses
High Cut Thru Resistance
High Performance Thermal Transfer
Excellent Mechanical Properties**

**Excellent Electrical Properties
Resistant to Handling
Lamination Ready
High Temperature Rating**

**Cost Effective Polyimide Solution
Indefinite Shelf Life
Rolls, Sheets, Die Cuts
Short Lead Times**

Typical Applications (TH / THB)	Devinall Roll Information	Color	Max Roll Width	Core Size Dia.	Typical Lead Time
* Insulation Pad Printed Circuit Boards	100 TH	Amber	20" (500mm)	3.0" (76mm)	~3 weeks
* Flexible Circuits	200 TH	Amber	20" (500mm)	3.0" (76mm)	~3 weeks
* Heater Circuits	300 TH	Amber	20" (500mm)	3.0" (76mm)	~3 weeks
* Power Supplies	300 THB	Black	20" (500mm)	3.0" (76mm)	~4 weeks
* Voice Coils	500 THB	Black	20" (500mm)	3.0" (76mm)	~4 weeks
* Ceramic Boards					
* Etching / Shims					
* Insulation Layer for EMI Shielding					
Available with heat activated adhesive coatings (non-thermoset or thermoset) as well as pressure sensitive adhesive laminations.					
Standard Devinall TH (Thermal) THB (Thermal Black)					
TH (Amber) Series					
Devinall 100 TH.....0.001" (0.025mm)					
Devinall 200 TH.....0.002" (0.051mm)					
Devinall 300 TH.....0.003" (0.076mm)					
THB (Black) Series					
Devinall 300 THB.....0.003" (0.076mm)					
Devinall 500 THB.....0.005" (0.127mm)					
Equivalent to MT or MTB type polyimide Manufacturing Thickness Tolerance: +/- 10%					
Product Roll Delivery Options					
* Log Rolls (standard)					
* Slit Rolls & Die Cuts Available					
Other Information					
* Manufactured to ISO 9001:2008 Standards					
* RoHs Compliant Material					
* Lamination Ready					
* Die Cut Ready (steel rule, rotary die)					
For more information or to receive samples for review, please contact us toll free at 1-888-989-3832 (US Only) +1-949-369-7676 (International) or e-mail info@fasteladhesives.com					
	Devinall TH Typical Properties	Unit	MD	TD	
	Thermal Conductivity	W/m-k	0.36		
	Tensile Strength	Mpa	136	111	
	Elongation	%	35	40	
	Dielectric Strength (100 TH)	V/mil	5400		
	Dielectric Strength (300 TH)	V/mil	4500		
	Volume Resistivity	ohm-cm	1.0 x 10 ¹⁶		
	Dielectric Constant	25°C	4.0		
	Cut Thru	lbs	~40		
	Devinall THB (Black) Typical Properties	Unit	MD	TD	
	Thermal Conductivity	W/m-k	0.45		
	Tensile Strength	Mpa	115	110	
	Elongation	%	30	30	
	Dielectric Strength (300 THB)	V/mil	1800		
	Dielectric Strength (500 THB)	V/mil	1600		
	Volume Resistivity	ohm-cm	1.0 x 10 ¹²		
	Dielectric Constant	25°C	~5.2		
	Cut thru (300 THB)	lbs	~85		
	Cut thru (500 THB)	lbs	~105		