



# DUPONT™ TEMPRION™ EIF X SERIES

## ELECTRICALLY INSULATING FILM

### DESCRIPTION

DuPont™ Temprion™ EIF X Series is a flexible laminate film comprising an electrically insulating, puncture resistant Kapton® polyimide core coated with a pressure sensitive, thermally conductive adhesive on one or both sides.

Temprion™ EIF features Kapton® MT or Kapton® MT+ polyimide as a carrier to achieve best-in-class thermal performance for an electrically insulating film, where electrically isolating components within a package is critical to operation.

### APPLICATIONS

- Thermal Interface Material
- Power Electronics
- CPU/GPU
- Battery Attachment

### FEATURES

- Low thermal resistance
- High puncture resistance
- Minimal application pressure
- UL 94 V-0 flammability rating
- RoHS Compliance

**Table 1 – Typical Properties of DuPont™ Temprion™ EIF X Series Electrically Insulating Film**

Property	XA037037D037	XA037075D075	XA050025S000	Test Method
Thickness, mil (mm)	4.5 (0.111)	7.5 (0.191)	3 (0.076)	ASTM D374
Reinforcement Carrier	Kapton® MT+	Kapton® MT+	Kapton® MT+	N/A
Continuous Use Temp, °F (°C)	-4 to 248 (-20 to 120)			N/A
Thermal Conductivity, W/m·K	0.72	0.67	0.8	ASTM D5470
Thermal Impedance, °C·in <sup>2</sup> /W (°C·cm <sup>2</sup> /W) @ 45 psi (0.3 MPa)	0.24 (1.54)	0.47 (3.05)	0.18 (1.18)	ASTM D5470
Breakdown Voltage, Vac	6550	6550	10000	ASTM D149
Volume Resistivity, Ω·cm	> 10 <sup>15</sup>			ASTM D257
90° Peel Strength @ RT, against smooth AI, 1hr dwell, lb/in width (N/cm width)	1.4 (2.4)	2.0 (3.4)	1.0 (1.8)	ASTM D3330
Flammability	V-0		Pending	UL94
RoHS Compliant	Yes			N/A

[www.temprion.dupont.com](http://www.temprion.dupont.com)

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