



# DUPONT™ TEMPRION™ PGF N SERIES

## PREFORMED GAP FILLER

### DESCRIPTION

DuPont™ Temprion™ PGF-N Series are non-silicone elastomeric pads that feature high temperature stability with electrical insulation and high thermal conductivity.

Temprion™ PGF-N has been designed to deliver long term reliability for applications that require continuous operating temperatures up to 250°C.

### APPLICATIONS

- Thermal Interface Material
- Power Electronics

### FEATURES

- High temperature stability
- Non-silicone elastomer
- Low thermal resistance
- Electrical insulation
- UL 94 flammability rating (pending)
- RoHS Compliance

**Table 1 – Typical Properties of DuPont™ Temprion™ PGF N Series Preformed Gap Filler**

Property	N18 Series			N10 Series			Test Method
Thickness, mil (mm)	8 (0.2) – 40 (1.0)			8 (0.2) – 40 (1.0)			ASTM D374
Reinforcement Carrier	none						–
Continuous Use Temp, °F (°C)*	-4 to 482 (-20 to 250)						–
Thermal Conductivity, W/m•K	1.8			1.0			ASTM D5470
Thermal Performance vs. Pressure**							
Pressure, psi (MPa)	14.5 (0.1)	43.5 (0.30)	72.5 (0.5)	101.5 (0.7)	130.5 (0.9)	159.5 (1.1)	
Thermal Impedance, °C•in <sup>2</sup> /W (°C•cm <sup>2</sup> /W)**	0.67 (4.0)	0.58 (3.70)	0.55 (3.60)	0.51 (3.30)	0.48 (3.10)	0.45 (2.90)	
Breakdown Voltage, kVac/mm	15			13			ASTM D149
Volume Resistivity, Ω•cm	> 10 <sup>10</sup>						ASTM D257
Flammability	Pending						UL-94
RoHS Compliant	Yes						–
Shore Hardness-A Scale	90			80			ASTM D2240

\*Continuous operating temperature determined by thermogravimetric analysis (24 h dwell)

\*\*Thermal impedance was measured PGF-N180500 and includes interfacial resistances.

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