

## TGF50BN

Leader Tech's TGF50BN series thermal gap filler has excellent flexibility, insulation, compressibility, and natural surface viscosity. It is used to fill the gap and realize the heat transfer between the heating parts and cooling parts. It also has insulation and shock mitigation effects. It can satisfy the design requirements for mini-type and ultra-thin equipment's with excellent manufacturability and practicability.

### Features:

- Low thermal resistance
- UL94 V-0 recognized
- Excellent electrical insulation performance and heat resistance
- RoHS and Halogen Compliant

### Applications:

- Between chip and heat-dissipation modules
- Optoelectronics industry
- Netcom products
- New energy Battery and Automotive Industry
- Household Appliances
- Wearable Technology

### Storage Conditions:

- Store in the darkness
- Storage Temperature:  $\leq 30$  °C
- Storage Humidity:  $\leq 70\%$
- When stacking the parts, the parts should not be higher than 7 layers or more than 1mm

### Shelf Life:

- Stored at storage conditions: Two years
- Stored in unqualified storage conditions: 6 months

**Properties:**

Item	Parameter	Unit	Test Method
Color	Dark Grey	-	Visual
Thickness	1 ~ 4	mm	ASTM D374
Hardness	50 ~ 70(±10)	Shore 00	ASTM D2240
Density	2.0(±0.5)	g/cc	ASTM D792
Tensile Strength	≥0.15	Mpa	ASTM D412
Elongation	≥60	%	ASTM D412
Compression Ratio	≥20(@50PSI)	%	ASTM D695
UL Certification	V-0	-	UL94
Operating Temperature	-50 ~ 160	°C	IEC 600068-2-14

**Thermal Characteristics:**

Thermal Conductivity	5.0(±0.25)	W / m·K	ASTM D5470
Thermal Resistance	≤0.6(@20PSI/1mm)	°Cin <sup>2</sup> /W	ASTM D5470

**Electrical Properties:**

Volume Resistivity	≥10 <sup>10</sup>	Ω·cm	ASTM D257
Dielectric constant	≥5	@1MHz	ASTM D150
Dielectric loss	≤0.1	@1MHz	ASTM D150