

N700B

Non-Silicone Thermal Conductive Pad

LiPOLY Non-Silicone Thermal Compound N700B is made of non-silicone resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N700B is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

FEATURES

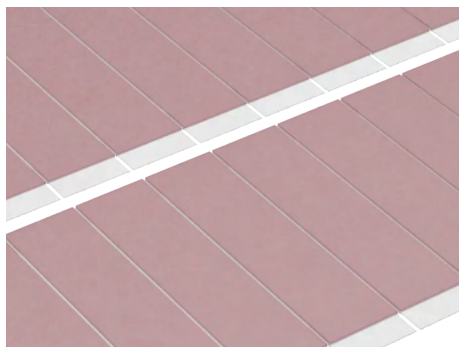
- / Thermal conductivity: 3.0 W/m·K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

TYPICAL APPLICATION

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

SPECIFICATIONS

- / Sheet form
- / Die-cut parts



TYPICAL PROPERTIES

PROPERTY	N700B	UNIT	TEST METHOD
Color	Red	-	Visual
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	mm	ASTM D374
Density	2.6	g/cm ³	ASTM D792
Hardness	60	Shore OO	ASTM D2240
Application temperature	-60~130	°C	-
Low molecular Siloxane (D3 to D20 total)	N.D	%	Gas Chromatography
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	27	%	ASTM D5470 modify
Deflection @20 psi	42	%	ASTM D5470 modify
Deflection @30 psi	51	%	ASTM D5470 modify
ELECTRICAL			
Dielectric breakdown	16	KV/mm	ASTM D149
Surface resistivity	>10 ¹¹	Ohm	ASTM D257
Volume resistivity	>10 ¹⁰	Ohm-m	ASTM D257
THERMAL			
Thermal conductivity	3.0	W/m·K	ASTM D5470
Thermal impedance@10 psi	0.671	°C-in ² / W	ASTM D5470
Thermal impedance@20 psi	0.543	°C-in ² / W	ASTM D5470
Thermal impedance@30 psi	0.392	°C-in ² / W	ASTM D5470

The chemical formula indicates that if Cyclic polydimethylsiloxane (HO-[Si(CH₃)₂O]_n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight siloxanes will makes the electric products uncontacted.

Thermal Impedance vs. Pressure vs. Deflection

