

# N700C

## Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N700C is made of non-silicone resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N700C 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

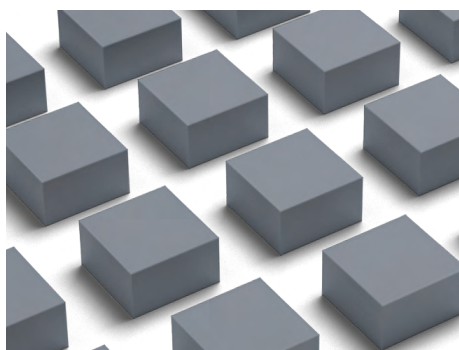
- / Thermal conductivity: 5.0 W/m\*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

### TYPICAL APPLICATION

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

### SPECIFICATIONS

- / Sheet form
- / Die-cut parts



### TYPICAL PROPERTIES

PROPERTY	N700C	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.2	ASTM D792	g/cm <sup>3</sup>
Hardness	55	ASTM D2240	Shore OO
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0061	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	16	ASTM D5470 modify	%
Deflection @20 psi	46	ASTM D5470 modify	%
Deflection @30 psi	68	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 <sup>11</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>10</sup>	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.312	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@20 psi	0.208	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@30 psi	0.132	ASTM D5470	°C-in <sup>2</sup> / W

The chemical formula indicates that if Cyclic polydimethylsiloxane (HO-[Si(CH<sub>3</sub>)<sub>2</sub>O]<sub>n</sub>-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

