

# N700B

## Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N700B is made of non-silicon resin material. No low-molecular-weight siloxane volatilization, no electrical contact & pollution problems. N700B is flexible and has great thermal conduction, making the thermal resistance as low as possible. The thermal conductivity is 3.0W/m\*K. It's suitable for optical and sensitive electric components.

### 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

### SPECIFICATIONS

- / Sheet form
- / Die-cut parts



### TYPICAL PROPERTIES

PROPERTY	N700B	TEST METHOD	UNIT
Color	Red	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.6	ASTM D792	g/cm <sup>3</sup>
Hardness	60	ASTM D2240	Shore OO
Application temperature	-60~125	-	°C
ROHS & REACH	Compliant	-	-
<b>COMPRESSION@1.0mm</b>			
Deflection @10 psi	27	ASTM D5470 modify	%
Deflection @20 psi	42	ASTM D5470 modify	%
Deflection @30 psi	51	ASTM D5470 modify	%
<b>ELECTRICAL</b>			
Dielectric breakdown	10	ASTM D149	KV/mm
Surface resistivity	>10 <sup>11</sup>	ASTM D257	Ohm
Volume resistivity	>10 <sup>10</sup>	ASTM D257	Ohm-m
<b>THERMAL</b>			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.392	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@20 psi	0.236	ASTM D5470	°C-in <sup>2</sup> / W
Thermal impedance@30 psi	0.169	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 make the electric products uncontacted.

### Thermal Resistance vs. Pressure vs. Deflection

