

N800CH

Non-Silicone Thermal Conductive Pad

LiPOLY Non-Silicone Thermal Compound N800CH is made of non-silicone resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800CH 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: 15.0 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	N800CH	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm ³
Hardness	50	ASTM D2240	Shore OO
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCN (wt%)	0.0043	By LiPOLY	-
TML	<0.04	By LiPOLY	%
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	31	ASTM D5470 modify	%
Deflection @30 psi	59	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	15.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.153	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.119	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.067	ASTM D5470	°C-in ² / W

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

