

N700A

Non-Silicone Thermal Conductive Pad

LiPOLY N700A is silicone-free thermal interface materials which are suitable for the cooling of components which may be effected by silicone outgassing such as optical devices, automotive electronics or military hard-wear.

Features-

- Thermal conductivity:1.5 W/m*K
- It's maked by non-silicone resin materials
- Low contact thermal resistance
- With electrical insulation
- Outstanding thermal conductivity
- Qualified for UL94V-0
- Applicable to optical and sensitive electric components

Typical Applications-

- HDDS
- Optical appliance

Specifications-

- Sheet form
- Die-cut parts



Typical Properties-

PROPERTY	N700A	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.2	ASTM D792	g/cm ³
Hardness	60	ASTM D2240	Shore OO
Application temperature	-60~125	-	°C
COMPRESSION@1.0mm			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	26	ASTM D5470 modify	%
Deflection @30 psi	43	ASTM D5470 modify	%
Deflection @40 psi	52	ASTM D5470 modify	%
Deflection @50 psi	64	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	10	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	1.5	ASTM D5470	W/m*K
Thermal impedance@10psi	0.70	ASTM D5470	°C-in ² /W
Thermal impedance@30psi	0.29	ASTM D5470	°C-in ² /W
Thermal impedance@50psi	0.18	ASTM D5470	°C-in ² /W
FLAME RATING			
UL Flammability class	V-0	UL94	-

The chemical formula indicates that if Cyclic polydimethylsiloxane ($\text{HO}[\text{Si}(\text{CH}_3)_2\text{O}]_n\text{H}$) 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.