

N700C

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N700C is made of non-silicon 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

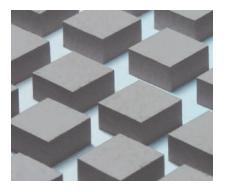
- / Thermal conductivity:5.0 W/m*K
 / It's made by non-silicone resin
 materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

■ TYPICAL APPLICATION

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

■ SPECIFICATIONS

- / Sheet form
- / Die-cut parts

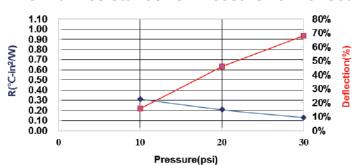


■ TYPICAL PROPERTIES

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/cm³
Hardness	55	ASTM D2240	Shore OO
Tensile Strength	0.15	ASTM D412	Kgf/cm²
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCM (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	>1011	ASTM D257	Ohm
Volume resistivity	>1010	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.312	ASTM D5470	°C-in²/ W
Thermal impedance@20 psi	0.208	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.132	ASTM D5470	°C-in²/ W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)20]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 silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection



Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LIPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental orconsequential damages of any kind. All LIPOLY products are sold in accordance with the LIPOLY Terms and Conditions in effect at the time of purchase and a copy thich will be furnished upon request. All rights reserved, including LIPOLY trademarks or registered trademarks of LIPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright 2023 LIPOLY.