

N800A-s

Non-Silicone Thermal Conductive Pad

Non-Silicone Thermal Compound N800A-s is made of non-silicone resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800A-s 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: 9.0 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 | N800A-s | TEST METHOD | UNIT |
|--|-------------------|--------------------|------------------------|
| Color | Pink | Visual | - |
| Surface tack 2-side/1-side | 2 | - | - |
| Thickness | Customized | ASTM D374 | mm |
| Density | 3.4 | 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%) | 0.0049 | By LiPOLY | - |
| ROHS & REACH | Compliant | - | - |
| COMPRESSION@1.0mm | | | |
| Deflection @10 psi | 14 | ASTM D5470 modify | % |
| Deflection @20 psi | 35 | ASTM D5470 modify | % |
| Deflection @30 psi | 67 | 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 | 9.0 | ASTM D5470 | W/m*K |
| Thermal impedance@10 psi | 0.238 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@20 psi | 0.166 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@30 psi | 0.102 | 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

