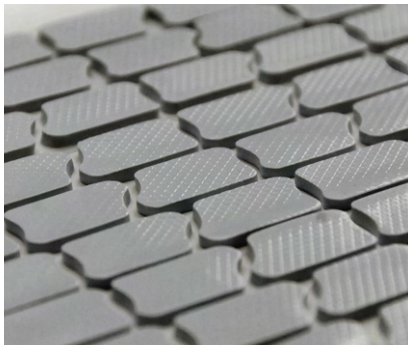
THER NCHs-800-15-50

Patron
Passive Elektronic

Non-Silicone Thermal Conductive Pad



Non-Silicone Thermal Compound NCHs-800 is made of non-silicon resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. NCHs-800 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

HOW TO ORDER

Patron THER NCHs-800-15-50 XXX-YYY-ZZmm
XXX = width in mm
YYY = depth in mm
ZZ = thickness in mm

https://www.patron-components.com/

TYPICAL PROPERTIES

PROPERTY	NCHs-800	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm³
Hardness	50	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%)	0.0040	-	-
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-in²/ W
Thermal impedance@20 psi	0.119	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.067	ASTM D5470	°C-in²/ W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (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 silox-anes will makes the elecetic products uncontacted.

Thermal Resistance vs. Pressure vs. Deflection