

H-putty

Thermal Conductive Putty

LiPOLY H-putty is a one-part dispensable material with thermal conductivity 3.5 W/m*K. High deformation can fill small air gaps perfectly to remove tolerance. It also can overcome overflow and drying problems to increase the thermal conductivity. H-putty is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

FEATURES

- / Thermal conductivity:3.5 W/m*K
- / Bond line thickness:100-3000μm
- / Designed to remove manufacturing tolerances
- / Does not produce stress on delicate components
- / No vertical flow
- / Dispensable for serial manufacture
- / For any high compression and low stress application

TYPICAL APPLICATION

- / Between CPU and heat sink
- / Between a component and heat sink
- / High speed mass storage drives
- / Telecommunication hardware
- / Flat-panel displays
- / Set-top box
- / IP CAM
- / 5G base station & infrastructure
- / EV electric vehicle

CONFIGURATIONS

- / Cartridges: 30ml, 55ml, 330ml
- / Bucket: 1kg, 25kg

PRESERVATION

It can be preserved for 60 months under the condition of unopened and under room temperature 25°C.

TYPICAL PROPERTIES

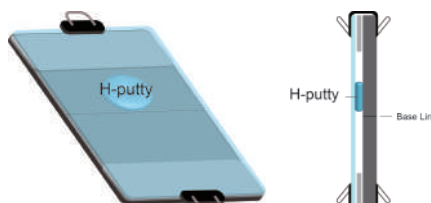
| PROPERTY | H-putty | TEST METHOD | UNIT |
|-------------------------|-------------------|-------------|------------------------|
| Color | Blue | Visual | - |
| Resin base | Silicone | - | - |
| Viscosity | 15000 | DIN 53018 | Pa.s |
| Density | 3.0 | ASTM D792 | g/cm ³ |
| Application temperature | -60~180 | - | °C |
| Bond line thickness | 100~3000 | - | μm |
| Shelf life | 60 months | - | - |
| ROHS & REACH | Compliant | - | - |
| ELECTRICAL | | | |
| Dielectric breakdown | 12 | ASTM D149 | KV/mm |
| Volume resistivity | >10 ¹³ | ASTM D257 | Ohm-m |
| THERMAL | | | |
| Thermal conductivity | 3.5 | ASTM D5470 | W/m*K |
| Thermal impedance@10psi | 0.076 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@30psi | 0.072 | ASTM D5470 | °C-in ² / W |
| Thermal impedance@50psi | 0.069 | ASTM D5470 | °C-in ² / W |

PLEASE NOTE

/ Using Automatic Homogenizer can improve the sedimentation phenomenon rapidly to achieve a homogeneous effect. We strongly recommend put cartridge in homogenizer for 3~5 minutes before dispensing the material.
Notice: if material homogenized more than 24 hours, it must be homogenized again while use it.

VERTICAL RELIABILITY

Using 3.0mm pad as a gap control, put the putty between the aluminum and the glass panel mark the initial position. Then, place it in the oven with 125°C for 1,000 hours and observe its displacement after reliability test



Material no dropped or changed after high temperature aging testing