X-putty

Thermal Conductive Putty

LiPOLY X-putty is a one-part dispensable material with thermal conductivity 3.0W/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. X-putty is a great alternative to thermal grease and ideally suited for dispensing using the dispensing robot.

FEATURES

- / Thermal conductivity:3.0 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

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



PROPERTY	X-putty	TEST METHOD	UNIT
Color	Gray	Visual	-
Resin base	Silicone	-	-
Viscosity	17000	DIN 53018	Pa.s
Density	2.8	ASTM D792	g/cm³
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	>1013	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	3.0	ASTM D5470	W/m*K
Thermal impedance@10psi	0.110	ASTM D5470	°C-in²/ W
Thermal impedance@30psi	0.080	ASTM D5470	°C-in²/ W
Thermal impedance@50psi	0.075	ASTM D5470	°C-in²/ W

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.





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