

PK404DM

Double package fast curing thermal conductive gel

Fast Curing Thermal Interface Material-

LiPOLY PK404DM is a highly conformable , Fast curing at RT. , high thermal conductivity 3.6 W/m*K , non-flammable interface materials. It is excellent for filling small air gaps , making reliable contact with heat source & sink.



Applications-

- Between CPU and heat sink.
- Between a component and heat sink.
- Power supplies
- High speed mass storage drives
- Telecommunication hardware

Construction-

- Characteristics: Two parts Silicone compound. Thermal conductivity 3.6 W/m*K.
- Configurations: 50 ml

PK404DM belong to silicone gel RTV2

1. Open the cap to set up the mixing tube, squeeze out the A&B gel and mix it even by the mixing tube.
2. Instrument: Gel dispensing Robot or manual dispensing.

Notices:

If the interface has organic compounds such as Nitrogen (N), Phosphorous (P), Sulfur (S) etc., and heavy metals ionic compound such as Tin (Sn), Lead (Pb), Mercury (Hg), Antimony (Sb), Bismuth (Bi), Arsenic (As) etc., and Organometallic-salts etc., which will cause the gel incomplete curing. In the less serious case, the surface and the interface will curve incompletely. In the serious case, the gel will be non-curved. Environmental way: Except to asking the right mixing proportion, the mixing container (such as: paper cup, plastics cup etc.), which the intine has wax oil and the plasticizer will permeate, also the oven will produce epoxy resin and varnish. Before you use it, please make sure the machine is dry and clean. If it has contacted the contaminant as above, please testing it first.

Conservation:

1. In the unused condition, it can conserve for 12 months at the indoor temperature at 25 degree.
2. If you mixed the A. B gel, it should be use at that time only, please do not use after a day.

Thermal Resistance-

PROPERTY	PK404DM	TEST METHOD	UNIT
Color	Blue (A part)	visual	-
	White(B part)		
Solid content	100%(Two-part: 1:1)	-	-
Viscosity A	47	THERMO HAAKE RV1 C35/2 TiL R=4.0 (1/s)	Pa.s
Viscosity B	48	THERMO HAAKE RV1 C35/2 TiL R=4.0 (1/s)	Pa.s
Density	3.0	ASTM D792	g/cm ³
Shelf Life	6 months	-	-
SOLID (AFTER CURE)			
Thermal Conductivity	3.6	ASTM D5470	W/m*K
Thermal Impedance@10mils BLT	0.25	ASTM D5470	°C-In ² /W
Thermal Impedance@20mils BLT	0.47	ASTM D5470	°C-In ² /W
Thermal Impedance@30mils BLT	0.73	ASTM D5470	°C-In ² /W
Hardness (Shore 00)	83	ASTM D2240	-
Volume Resistivity	1012	ASTM D257	Ohm-cm
Working Temp (long term)	-55 to 205°C	-	°C
Operating ambient Temp.	20 to 30°C	-	°C
Flame Rating	V-0	UL94	-
CURE SCHEDULE			
Pot Life	10~15 min	-	-
Cure @ 25°C (min)	30 min	-	-
Cure @ 100°C (sec)	72 sec	-	-
Cure @ 150°C (sec)	20 sec	-	-
RELIABILITY			
Thermal Impedance	initial	250 hr	500 hr
80°C Aging	0.17	0.18	0.18
125°C Aging	0.17	0.19	0.18
85°C/85% RH	0.17	0.18	0.18