PS-80 Thermal Conductive Encapsulant

Description：

This product is a two-component silicone encapsulant, which is a liquid electronic material with various properties such as thermal conductivity and buffering. The product can be cured at room temperature or under heat. It can be widely used to fill the gap between hot electronic devices and heat sink or metal housing. It has excellent flowability and leveling before curing. After curing, it will not come out of the protective shell and can meet the wide range of customer needs.

Characteristic

- Good flowability and can effectively fill the gap
- Good insulation property with good reliability
- Good processability

Typical Applications

- LED lighting
- Automotive electronics
- Telecom base stations
- Microprocessors and graphic chips

Typical Properties

Properties	Typical value		Test method
Before mix	Part A	Part B	
Color	Black	White	Visual
Viscosity* (mPa*s)	2,100	1,500	ASTM D2196
Viscosity* (mPa*s)	1,800		ASTM D2196
Density (g/cc)	1.7	1.7	ASTM D792
Mix ratio	1:1		/
Cured properties			
Color	Black		Visual
Thermal Conductivity (W/m*K)	0.8		ASTM D5470
Durometer (Shore A)	40		ASTM D2240
Dielectric Strength (kV/mm)	>10		ASTM D149
Volume Resistivity（Ω*cm）	$>10^{14}$		ASTM D257

Properties	Typical value	Test method
Working Time@25°C (h)	2	ASTM D2196
Cure Time@25°C (h)	24	ASTM D2240
Cure Time@80°C (min)	30	ASTM D2240
Flame Classification	V-0	UL-94
Tensile Strength (MPa)	0.7	ASTM D412
Elongation (%)	30	ASTM D638
Operating Temperature (°C)	-40~150	/

*Brookfield DV2T HB-03, 20rpm

Storage：

- Shelf life: 6 months
- Temperature: 10°C~30°C
- Relative humidity: RH<70%

Package：

- 5kg/Kit (Part A and Part B 2.5kg each)
- 50kg/Kit (Part A and Part B 25kg each)