Technical Data Sheet

Thermal Gel 21-335

Version TDS.21-335.V.A.0

Description

21-335 Series is Two-Part Thermal Gel with low viscosity, silicone putty thermal gap filler in which is cured in room temperature. It is designed to be used where large gap tolerances are present and low mechanical stress on delicate components are needed. It is ideal for filling variable gaps between multiple components and a common heat sink.

21-335 Series has a composition which yields superior thermal performance and super compliancy. It transfers little to no pressure between interfaces. Specialized rheology allows for easy flow under pressure. Its clear boundary after cure make it no mess problem when reworking.

Typical Properties

Properties			21-335	Test Method
Thermal	Thermal Conductivity (W/m-K)		3.2	ASTM D5470
	Thermal Resistance (°C.cm^2/W)@ 1mm		3.05	ASTM D5470
Physical	Before Cure	Color/ Part A	Green	Visual
		Color/ Part B	Light grey	
		Viscosity as mixed (mPa-s)	520,000	Brookfield Viscometer TF Spindle @5rpm
			500,000	Brookfield Viscometer TF Spindle @20rpm
		Mix Ratio	1:1	/
	Cured	Color	Green	Visual
		Tensile lap-shear strength (psi)	18	GB/T 7124-2008
		Density (g/cc)	3.0	ASTM D792
		Hardness (Shore OO)	50	ASTM D2240
Electrical As Cured	Breakdown Voltage(kV/mm)[1]		>6	ASTM D149
	Volume Resistivity (ohm-cm)		>10^12	ASTM D257
	Dielectric Constant @10MHz		4.9	ASTM D150
Cure Schedule	Operation Temperature Range(°C)		-40~150	/
	Pot Life @ 25 °C (min)		120	Time for Viscosity to Double
	Cure @ 25 °C (hrs)		18	Rheometer- Time to Read 90% Cure
	Cure @ 100 °C (min)		20	

1. Ramp up speed 500V/s, leakage current 0.5mA

Attention: initial extruded 2 grams of material using a static mixer head may not be well mixed The tooling/assembling time is <2 hours after dispensing and after that the larger force is needed to compressed the gel.

Benefits

- Extreme Low stress induced during assembly
- Easy for rework
- Easily dispensable
- Cured in room Temperature
- Electrically Isolating
- Low Thermal Resistance

Applications

- Smart device/phone
- Cooling components to chassis, frame, or other mating components
- Memory modules
- Home & Small Office Network
- Mass Storage Devices
- Automotive Electronics
- Telecommunication Hardware
- Radios
- LED Solid State Lighting
- Power Electronics
- Set Top Boxes
- Audio & Video Component
- IT infrastructure
- GPS navigation and other portable devices

Ordering Information

21 - 3XX - 001 - YYYY

Thermal Gel — **Thermal Performance** — **Package Size**

Standard Package

21-335-001-050M = Thermal Gel 21-335 in a 120 g (50cc) cartridge

21-335-001-400M = Thermal Gel 21-335 in a 1 kg (300cc) cartridge

JONES TECH PLC
3 Dong Huan Zhong Road, BDA,Beijing 100176 China
TEL: +86 10 6786 2636 FAX: +86 10 67860291
E-mail: sales@jones-corp.com