

Thermal Gel 21-381

Version TDS.21-381.V.B.1

Description

21-381 is a soft, two-part, extremely high thermal conductivity silicone putty thermal gap filler in which is cured in room temperature. This gap filler 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. Specialized rheology allows for easy flow under pressure.



Benefits

- Extreme Low stress induced during assembly
- Clear boundary without mess during reworking
- Thermal Conductivity: 8 W/m-K
- Flow Rate: 25 g/min@90PSI
- Easily Dispensable
- Electrically Isolating
- Low Thermal Resistance

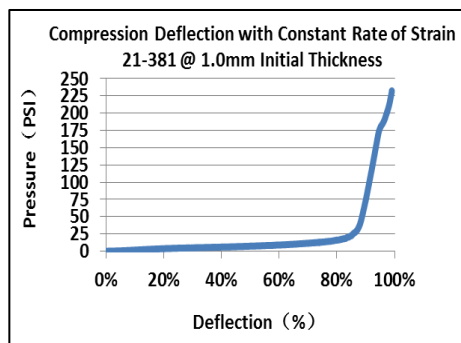
Applications

- Cooling components to chassis, frame, or other mating components
- Home & Small Office Network
- Mass Storage Devices
- Automotive Electronics
- Telecommunication Hardware
- Radios
- LED Solid State Lighting
- Power Electronics
- Set Top Boxes
- Audio & Video Component

Typical Properties

Properties	21-381	Test Method
Thermal	Thermal Conductivity (W/m-K)	8
	Continuous Use Temp. (°C)	-40~125
Physical	Before Cure Color/ Part A	Blue
	Color/ Part B	Grey
	Flowrate (g/min)	≥50
	Density (g/cc)	3.14
	Mix Ratio	1:1
Cured	Color	Light Blue
	Hardness (Shore OO)	70
Electrical	Dielectric Strength (kV/mm)	>3
	Volume Resistivity (ohm-cm)	1×10^{11}
	Dielectric Constant @1MHz	6.87
Cure Schedule	Pot Life @ 25 °C (hrs)	8
	Cure @ 25 °C (hrs)	24
Regulatory	Cure @ 100°C (min)	20
	Flammability Rating	V0
	Shelf Life @25°C (Months)	6
	RoHS Compliant	YES

Compression Deflection

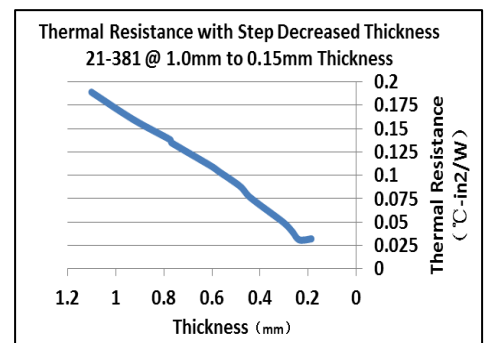


*Specimen Area: 1inch²
Rate of strain= 1.0mm/min

Standard Package

Storage Requirement

Thermal Resistance



*Specimen Area: 1inch²
The thickness of sample is controlled by limit slice
Decreased Thickness step = 0.1mm
(From 1.0mm to 0.2mm),
0.05mm(From 0.2mm to 0.15mm)

Cartridge of 150g (50cc);

Cartridge of 950g (300cc)

Room Temperature Between 0 to 35 degree

RH 50%

* Unopened Original Package

Disclaimers

- The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the issuing date of this TDS. When using our products, no matter what type of equipment they might be used for, be sure to make a written agreement on the specifications with us in advance. The design and specifications in this TDS are subject to change without prior notice.
- Do not use the products beyond the specifications described in this TDS. This TDS explains the typical performance of the products as individual component. Before use, check and evaluate their operations when installed in your products.
- Install the following systems for a failsafe design to ensure safety if these products are to be used in equipment where a defect in these products may cause the loss of human life or other significant damage, such as damage to vehicles (automobile, train, vessel), traffic lights, medical equipment, aerospace equipment, electric heating appliances, combustion/gas equipment, rotating equipment, and disaster/crime prevention equipment.

