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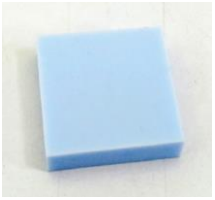
TH997

Silicone Thermal Pad

Description

TH997 is a pale blue, highly filled soft silicone rubber system suitable for used as thermal interface material of electronic devices. This silicone thermal pad is soft and flexible, and yet provides high thermal conductivity, good high temperature resistance and good electrical insulation.



Features

- Both side natural tack
- Low shore A hardness
- High compressible
- Good thermal conductivity
- Electrically insulation
- Easy to assemble

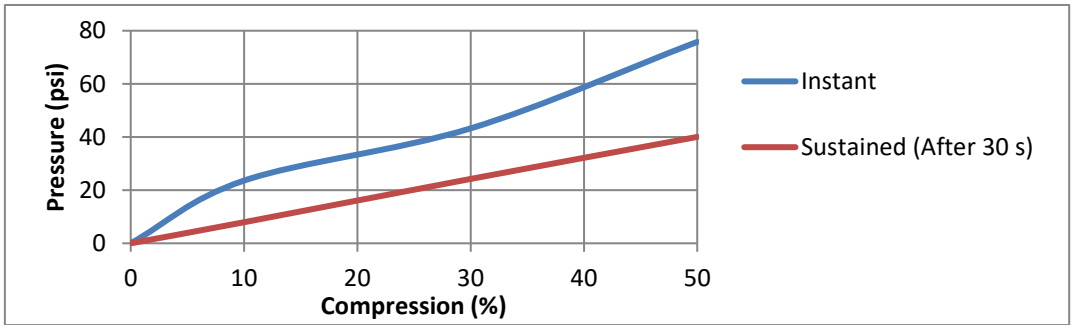
Applications

- Thermal conductive interface material for electronic parts and devices.

Cured Properties	Typical Value	Unit	Test Method
Color	Light Blue	-	PEN 10
Surface tackiness	Natural tack	-	PEN 10
Density	1.58	g/cm^3	PEN 14
Hardness	15	Shore A	ASTM D2240
Thermal conductivity	0.7	W/mK	ASTM D5470
Thermal resistance	13.7	Kcm^2/W	ASTM D5470
Heat Capacity	1.1	J/g-K	ISO 22007-2
Tensile strength	4.8	kgf/cm^2	ASTM D412-98a
Elongation at break	91	%	ASTM D412-98a
Flammability	V-0	-	PEN 55
Operating temperature	-40 to 200	°C	PEN 92
Dielectric breakdown voltage	27.3	kV	ASTM D149-09
Dielectric strength	18.2	kV/mm	ASTM D149-09
Volume resistivity	1.9 x 10^{13}	Ohms.cm	ESD STM11.12

* The values above are tested based on batch to batch basis. These values are not used as a basis for preparing specifications.
* PEN is referring to Penchem's test method; ASTM is for test reference only.
* Specimen dimension for thermal conductivity and thermal resistance measurement – 1.0mm thickness
* Specimen dimension for tensile and elongation at break test –ASTM D412 Type D dumbbell shape
* PEN 55 – UL94 as reference test method, samples thickness – 3.0mm.

Compression deflection



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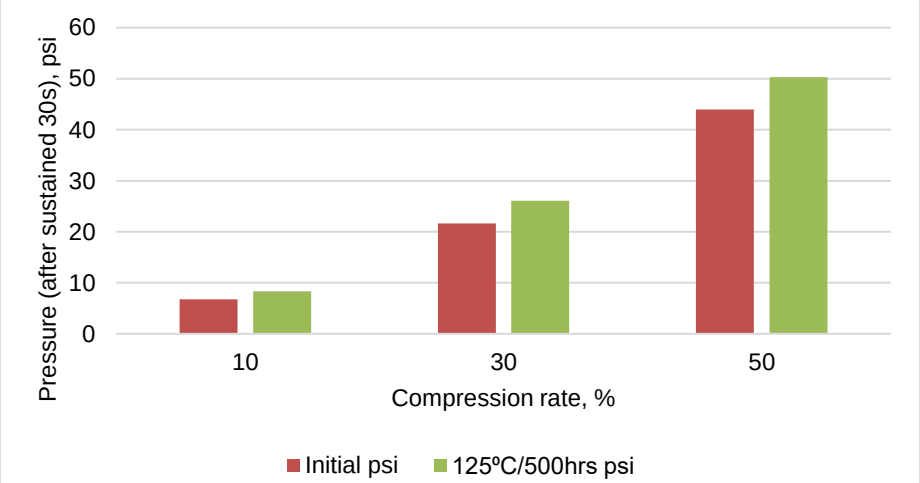
Compression rate (%)		10	30	50
Initial pressure	psi	23.60	43.25	75.79
Sustained pressure (after 30s)	psi	7.93	24.22	40.03

Remark: Specimen dimension: 25mm x 25mm x 1.5mm

Compression deflection after heat aging



Compression rate (%)		10	30	50
Initial	psi	6.73	21.61	43.95
125ºC/500hrs	psi	8.30	26.11	50.33

Remark: Pressure were measured after sustained for 30s. Specimen dimension: 25mm x 25mm x 1.0mm

Guideline of Use

1. Pick up silicone thermal pad from release film gently.
2. Make sure the surface of the substrate is clean and dried before apply the silicone thermal pad.
3. Position the silicone thermal pad to substrate.
4. Apply some pressure to ensure good contact.
5. The silicone thermal pad can be applied and removed easily (care must be taken during installation to avoid tearing).

Storage & Shelf Life

Store the silicone thermal pad in a dried place. Avoid prolong exposure to sunlight.

Shelf life: 3 years

Packaging

- Thickness range: 0.5 to 5.0mm

Other product dimension enquiry, please contact our sales department.

Environment, Health & Safety

This product is intended for industrial use only. For more safety information, please refer to Product Safety Data Sheet (SDS).

General Information

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