

Description

TH817 is a greyish colored both side natural tacky silicone gel-based thermal pad, suitable for use as thermal interface material to dissipate the heat from electronic devices, especially in integrated circuit (IC) and LEDs packaging. This thermal pad has medium hardness and flexible, and yet provides high thermal conductivity, good high temperature resistance and good electrical insulation.

Features

- High thermal conductivity (11W/mK)
- Low outgassing
- Flame retardant

Applications

- Thermal conductive interface material for electronic parts and devices.

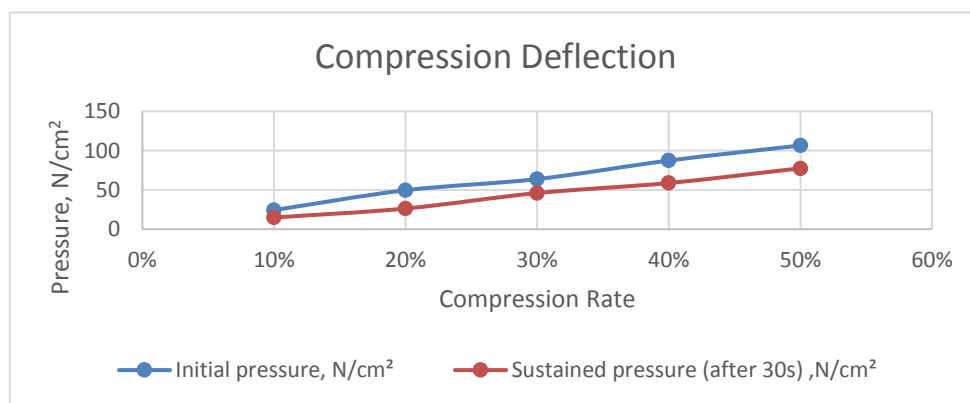
Cured Properties	Typical Value	Unit	Test Method
Color	Grey	-	PEN 10
Surface tackiness	Natural tack	-	PEN 10
Density	2.87	g/cm ³	PEN 61
Hardness, Shore OO	77	-	ASTM D2240
Thermal conductivity	11	W/mK	ASTM D5470
Thermal resistivity	0.756	K.cm ² /W	ASTM D5470
Operating temperature	-40 to 200	°C	PEN 92
Dielectric strength	8.36	kV/mm	ASTM D149
Volume Resistivity	1.48E+12	Ωcm	ASTM D257-14
Weight loss, 150°C/72hr	0.085	%	PEN 34
Bleed test, 100°C/100hrs	<1	mm	PEN 129
Flammability	V-0	-	PEN 55

* PEN is refer to Penchem test method

* The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on certificate of conformance or please contact Penchem representative.

* Specimen dimension for thermal conductivity and thermal resistance measurement = 1.0mm thickness, diameter = 3.3cm, contact pressure = 300kPa

Compression deflection



Compression rate (%)	Unit	10	20	30	40	50
Initial pressure	N/cm ²	24.30	49.60	63.80	87.40	106.60
Sustained pressure (after 60s)	N/cm ²	14.83	26.30	46.00	58.80	77.50

Remark: Specimen dimension: 10mm x10mm x 1.0mm

Revision P09: 30-May-2024

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Management System
ISO 9001:2015
ISO 14001:2015
IATF 16949:2016
www.tuv.com
ID 9105064144

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. The silicone thermal pad can be applied and removed easily (care must be taken during installation to avoid tearing and contamination).

Storage & Shelf Life

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

Shelf life: 12 months

Environment, Health & Safety

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

Product Dimension

- Thickness range: 1 to 2.0 mm

Other product dimension enquiry, please contact our sales department.

General Information

All right reserved. This information in this document is subjected to change without notice.

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