

Technical Data Sheet

ASTM D5470***

P-THERM®

PS-1593-0.25

Product Description:

P-THERM® PS-1593-0.25 is an ultra-soft silicone based thermally conductive gap filler with an embedded fiberglass support. PS-1593-0.25 boasts enhanced flexibility with its lower profile fiberglass dielectric layer over similar products used for thermal management in consumer electronic and automotive applications.

Construction / Properties:

General	Property	Value	Test Method
	Color	Green	Visual
	Thickness Range	0.25 mm	ASTM D374
	Reinforcement Carrier Type	Fiberglass	
	Density (g/cc)	2.44	ASTM D792
	Heat Capacity (J/g K) @ 50 C	0.80	ASTM E1269
	Hardness (Shore 00)	47	ASTM D2240
	Total Mass Loss (@ 125 C/24 hrs)	0.12%	ASTM E595**
	Flammability Rating	V-0	UL 94
	Continuous Use Conditions	-60 - 200 C	QSP-754
Electrical	Property	Value	Test Method
	Dielectric Breakdown Strength (kV/mm)	8.30	ASTM D149
	Volume Resistivity (ohm-cm)	I.0E+09	ASTM D257
rmal	Property	Value	Test Method
	Thermal Conductivity	3 W/m K	ASTM D5470*
ern		Thermal Performance vs. Strain	-

20

1.66

1.57

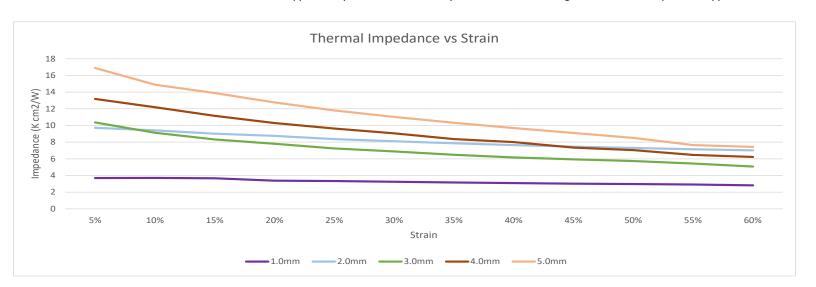
		Thermal Impedance (K cm²/W) @ 0.25mm
*	Th	ermal conductivity tested at 20% strain.

^{**} Tested at atmospheric pressure

Deflection (% Strain)

10

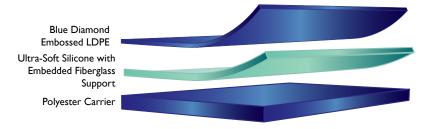
1.82



[🚧] Values tested include interfacial thermal resistance: Application performance is directly related to surface roughness, flatness and pressure applied.

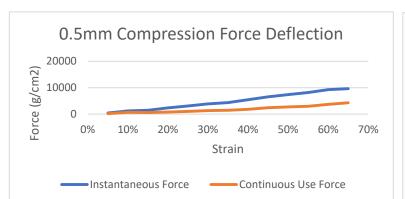
Features:

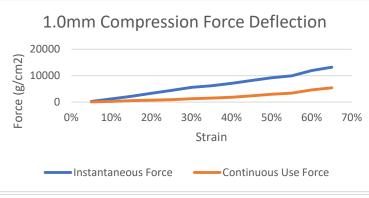
- Excellent Thermal Conductivity
- Excellent Compression Characteristics
- Good Wet-Out
- Superb Flexibility
- Excellent Converting Properties
- RoHS and HF Compliant

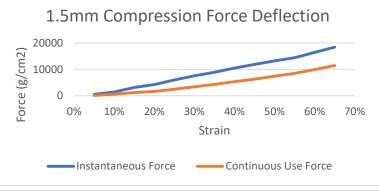


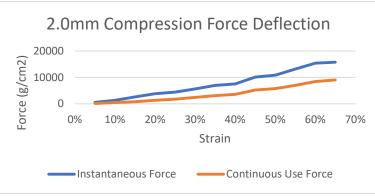
Applications:

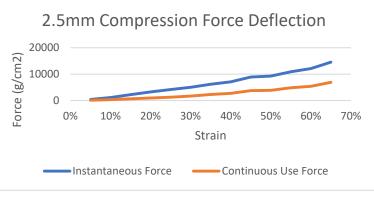
- LED Lighting
- Battery Components
- Infotainment Modules
- Smartphones
- Tablets
- Computers
- Digital Personal Assistants
- Automotive Lighting

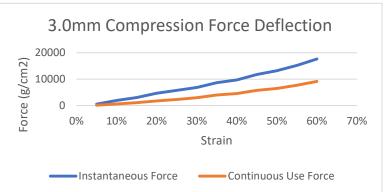












Specific tests should be performed by the end user to determine the product stability for the particular application.

For Additional Information:

E-mail: sales@polymerscience.com Toll Free: +1 888.533.7004

Web: www.polymerscience.com Revision: 040621 MARIAN www.marianinc.com

