Technical Data Sheet

P-THERM®

PS-1593N-0.25

Product Description:

P-THERM® PS-1593N-0.25 is an ultra-soft silicone based thermally conductive gap filler with an embedded fiberglass support. PS-1593N-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:

	Property	Value	Test Method
General	Color	Green	Visual
	Thickness Range	0.25 mm	ASTM D374
	Reinforcement Carrier Type	Fiberglass	--
	Density (g/cc)	2.82	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

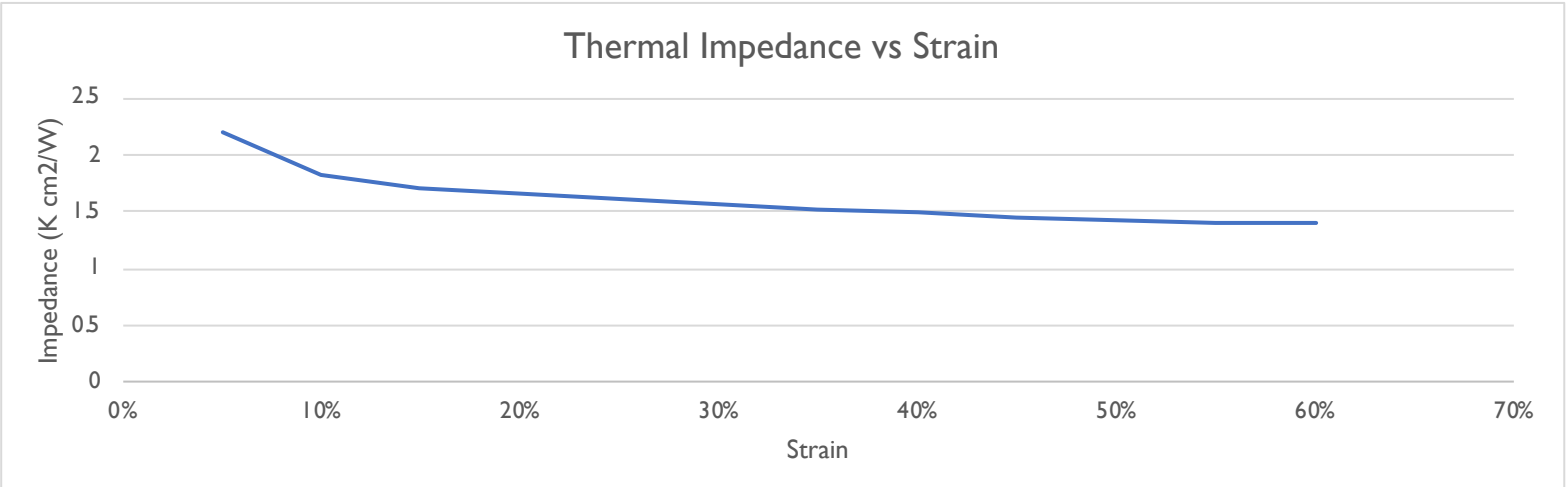
	Property	Value	Test Method
Electrical	Dielectric Breakdown Strength (kV/mm)	8.30	ASTM D149
	Volume Resistivity (ohm-cm)	1.0E+09	ASTM D257

	Property	Value			Test Method
Thermal	Thermal Conductivity	≥2.5 W/m K			ASTM D5470*
	Thermal Performance vs. Strain				
	Deflection (% Strain)	10	20	30	ASTM D5470***
	Thermal Impedance (K cm^2/W) @ 0.25mm	1.82	1.66	1.57	

* Thermal conductivity tested at 20% strain.

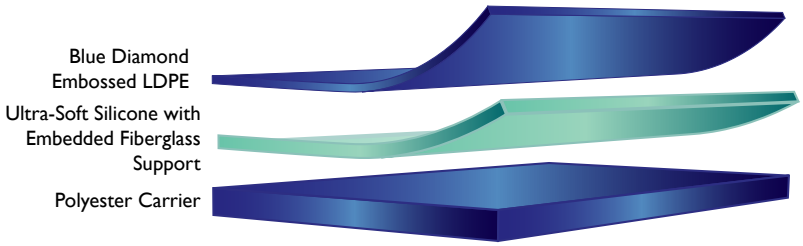
** Tested at atmospheric pressure

*** 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:
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