PTY-003

Silicone Based Thermally Conductive Gap Filler Pad

DESCRIPTION:

PTY-003 is a 12W/mK, silicone-based gap filler, formulated for the most demanding of heat transfer applications. PTY-003 can be supplied either as standard sheets or manufacturing-friendly die-cut parts.

FEATURES AND BENEFITS:

- High thermal conductivity
- Low thermal impedance
- High dielectric breakdown voltage
- Industry-best heat transfer

APPLICATIONS:

5G Devices | Telecom | Military | Electrical Vehicle

	Typical Properties	PTY-003	Test Method
Physical	Colour	Grey	Visual
	Carrier	None	
	Standard Thickness /mm	0.5-2	ASTM D374
	Specific Gravity	3.3	ASTM D792
	Hardness / Shore 00	65	ASTM D2240
	Percentage Deflection at 34 kPa (5 psi) (3mm thick)	5	ASTM C165 MOD
	Percentage Deflection at 69 kPa (10 psi) (3mm thick)	10	ASTM C165 MOD
	Percentage Deflection at 172 Kpa (25 psi) (3mm thick)	38	ASTM C165 MOD
	Percentage Deflection at 345 Kpa (50 psi) (3mm thick)	50	ASTM C165 MOD
	Operating Temperature range / C	-40 to 200	Internal Standard
Thermal	Thermal Conductivity / W/mk @ 172 Kpa (25 psi)	12	ASMT D5470
	Thermal Impedance / C--inch2/W @ 69 Kpa (10 psi) 3mm thick	0.7	ASMT D5470
	Heat Capacity J/g-K	1.747	ASTM E-1269
	Coefficient of Thermal Expansion / ppm/k	420	ASTM E-831
Electrical	Dielectric Strength / Kvac /mm	> 20	ASTM D-149
	Volume Resistivity / ohm-cm	$>10^{11}$	ASTM D257
	Dielectric Constant at 1,0000 kHz	3.2	ASTM D150
	Dissipation Factor at 1,0000 kHZ	<0.001	Internal Standard
Regulatory	Flammability Rating	VO	UL 94
	ROHS Compliant	Yes	Internal Standard
	Outgassing / %TML (%CVCM)	<1	ASTM E595
	Shelf Life From Date of Manufacture / Months	12 Months	Internal Standard

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