

AS50-s

Thermal Conductive Gap Pad

LiPOLY AS50-s is a thermally conductive pad designed for gap filling. The thermal conductivity is 5.0 W/m*K. Using fiberglass reinforced layer and great self-adhesive which can fit closely with non-flat heat sinks to increase the contact area. AS50-s is an excellent insulating material with characteristics of low stress damped vibration and shock absorption.

■ FEATURES

- / Thermal conductivity: 5.0 W/m*K
- / Designed for manufacturing
- / High dielectric breakdown
- / Shock and vibration absorber
- / Good mechanical strength
- / Fiberglass reinforced

■ TYPICAL APPLICATION

- / Between a component and heat sink
- / Flat-panel displays
- / LED, HDDs, DVDs
- / Heat pipe assemblies
- / Memory modules
- / Power supplies
- / 5G base station & infrastructure
- / EV electric vehicle

■ SPECIFICATIONS

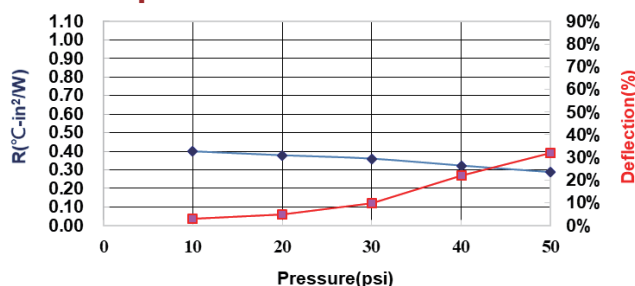
- / Roll form / Sheet form
- / Die-cut parts



■ TYPICAL PROPERTIES

PROPERTY	AS50-s	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	1	-	-
Reinforced layer	Fiberglass	-	-
Thickness	Customized	ASTM D374	mm
Density	3.1	ASTM D792	g/cm ³
Hardness	25	ASTM D2240	Shore OO
Application temperature	-60~180	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	3	ASTM D5470 modify	%
Deflection @20 psi	5	ASTM D5470 modify	%
Deflection @30 psi	10	ASTM D5470 modify	%
Deflection @40 psi	22	ASTM D5470 modify	%
Deflection @50 psi	32	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	10	ASTM D149	KV/mm
Surface resistivity	>10 ¹⁰	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	5.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.398	ASTM D5470	°C-in ² / W
Thermal impedance@20 psi	0.377	ASTM D5470	°C-in ² / W
Thermal impedance@30 psi	0.359	ASTM D5470	°C-in ² / W
Thermal impedance@40 psi	0.322	ASTM D5470	°C-in ² / W
Thermal impedance@50 psi	0.287	ASTM D5470	°C-in ² / W

Thermal Impedance vs. Pressure vs. Deflection



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