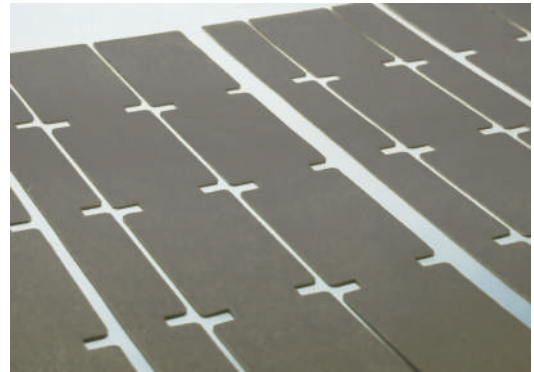


T-pad 900

Ultra Soft & High Thermal Conductivity Pad

Ultra Soft & High Thermal Conductivity interface materials.

LiPOLY T-pad 900 is a highly conformable & ultra soft for low stress applications , high thermally conductive , non-flammable interface materials. It is excellent for filling small air gaps , making reliable contact with heat source & sink.



Applications-

- Between CPU and heat sink.
- Between a component and heat sink.
- Flat-panel displays
- Power supplies
- High speed mass storage drives
- Telecommunication hardware

Construction-

Series	Characteristics	Configurations
T-pad 900	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

Thermal Impedance&Compression-

Compression Force(psi)	Thermal Impedance (°C-in ² /W)			Compression (%)		
	0.5mm	1.0 mm	2.0 mm	0.5mm	1.0 mm	2.0 mm
10	0.154	0.282	0.498	10	12	14
30	0.145	0.194	0.342	12	42	52
50	0.117	0.129	0.140	29	65	79

Test method: ASTM D5470

Typical Properties-

Property		TEST METHOD	UNIT
Color	Gray	Visual	-
Reinforced layer	Fiberglass	-	-
Surface tack 2-side/1-side	2-side weak	-	-
Thickness	0.5~2.5	ASTM D374	mm
Density	3.4	ASTM D792	g/cm ³
Hardness @ without fiberglass	5	ASTM D2240	00
Application temperature	-60~150	-	°C
COMPRESSION			
Deflection @10 psi	12	-	%
Deflection @30 psi	42	-	%
Deflection @50 psi	65	-	%
ELECTRICA			
Dielectric breakdown	>12	ASTM D149	KV/mm
Surface resistivity	>10 ¹¹	ASTM D257	Ohm
Volume resistivity	>10 ¹⁰	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	9	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.282	ASTM D5470	°C-in ² /W
Thermal impedance@30 psi	0.194	ASTM D5470	°C-in ² /W
Thermal impedance@50 psi	0.129	ASTM D5470	°C-in ² /W

Reliability-

Test Property	Compression Force (psi)	70°C				
		Initial	100hrs	250hrs	500hrs	1000hrs
Thermal Resistance	10	0.282	0.280	0.281	0.280	0.280
	30	0.194	0.192	0.193	0.194	0.193
	50	0.129	0.128	0.127	0.128	0.127

Test Property	Compression Force (psi)	150°C				
		Initial	100hrs	250hrs	500hrs	1000hrs
Thermal Resistance	10	0.282	0.281	0.281	0.280	0.281
	30	0.194	0.192	0.192	0.193	0.193
	50	0.129	0.128	0.129	0.128	0.128

Test Property	Compression Force (psi)	60°C / 90 % RH				
		Initial	100hrs	250hrs	500hrs	1000hrs
Thermal Resistance	10	0.282	0.281	0.282	0.282	0.280
	30	0.194	0.194	0.192	0.192	0.193
	50	0.129	0.129	0.128	0.128	0.127

Test Property	Compression Force (psi)	-40°C (30min) ↔ +125°C (30min)					
		0 cycles	100 cycles	200 cycles	300 cycles	400 cycles	500 cycles
Thermal Resistance	10	0.282	0.280	0.281	0.281	0.282	0.281
	30	0.194	0.193	0.193	0.194	0.193	0.193
	50	0.129	0.129	0.128	0.128	0.129	0.128

Test Property	Compression Force (psi)	Ultra Low Temp (-60°C)					
		Initial	100hrs	200hrs	300hrs	400hrs	400hrs
Thermal Resistance	10	0.282	0.282	0.281	0.282	0.280	0.281
	30	0.194	0.194	0.193	0.193	0.194	0.193
	50	0.129	0.128	0.129	0.128	0.129	0.129

Test method: ASTM D5470 , Specimen thickness = 1.0mm , Unit: °C-in²/W