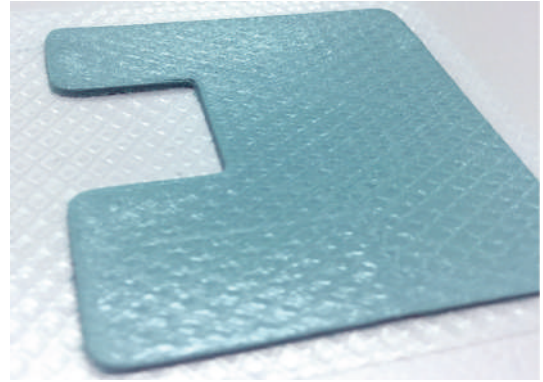


T-work 7000

Ultra Soft Thermal Conductivity Gap Filler

Ultra Soft & High Thermal Conductivity interface materials.

LiPOLY T-work 7000 is a highly conformable , ultra soft , high thermally conductive , non-flammable interface materials. It is excellent for filling small air gaps , making reliable contact with heat source & sink.



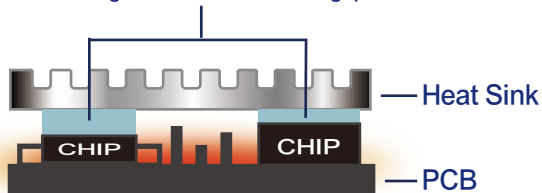
Applications-

- 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-work7000	Silicone compound with weak sticky surfaces.	Sheets form, Die-cuts parts

Ultra soft high thermal conductive gap filler



T-work7000 provides excellent compression and extremely low thermal resistance in form sharp with high thermal conductivity for gap filling between electrical component and heat sink, shielding metals.

Thermal Impedance&Compression-

Compression Force(psi)	Thermal Impedance (K-in ² /W)			Compression (%)		
	1.0mm T	2.0 mm T	3.0 mm T	1.0mm T	2.0 mm T	3.0 mm T
10	0.22	0.39	0.58	14	15	16
20	0.20	0.33	0.34	24	34	57
30	0.14	0.20	0.22	47	60	71
40	0.12	0.15	0.17	55	69	77
50	0.11	0.13	0.14	59	73	81

Test method: ASTM D5470

Typical Properties-

Property		TEST METHOD	UNIT
Color	Gray Green	Visual	-
Surface tack 2-side/1-side	2-side weak	-	-
Thickness	1.0~3.0	ASTM D374	mm
Density	3.4	ASTM D792	g/cm ³
Application temperature	-60~150	-	°C
COMPRESSION			
Deflection @10 psi	14	-	%
Deflection @20 psi	24	-	%
Deflection @30 psi	47	-	%
Deflection @40 psi	55	-	%
Deflection @50 psi	59	-	%
ELECTRICAL			
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	11	ASTM D5470	W/m*K
Thermal Conductivity	6.3	ISO 22007-2	W/m*K
Thermal impedance@10 psi	0.223	ASTM D5470	°C-in ² /W
Thermal impedance@20 psi	0.202	ASTM D5470	°C-in ² /W
Thermal impedance@30 psi	0.140	ASTM D5470	°C-in ² /W
Thermal impedance@40 psi	0.119	ASTM D5470	°C-in ² /W
Thermal impedance@50 psi	0.108	ASTM D5470	°C-in ² /W
FLAME RATING			
UL Flammability class	V-0	UL94	-

※ These data are provided for reference only. Engineers are reminded to test the material in varied application.

Reliability-

Test Property	Compression Force (psi)	70°C				
		Initial	100hrs	250hrs	500hrs	1000hrs
Thermal Resistance	10	0.223	0.224	0.223	0.224	0.225
	30	0.140	0.141	0.141	0.141	0.142
	50	0.108	0.110	0.109	0.109	0.111

Test Property	Compression Force (psi)	150°C				
		Initial	100hrs	250hrs	500hrs	1000hrs
Thermal Resistance	10	0.223	0.224	0.225	0.224	0.225
	30	0.140	0.142	0.143	0.142	0.143
	50	0.108	0.110	0.111	0.109	0.108

Test Property	Compression Force (psi)	60°C / 90 % RH				
		Initial	100hrs	250hrs	500hrs	1000hrs
Thermal Resistance	10	0.223	0.222	0.223	0.222	0.221
	30	0.140	0.141	0.142	0.142	0.141
	50	0.108	0.109	0.108	0.108	0.107

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	0.223	0.223	0.224	0.223	0.224	0.223
	30	0.140	0.142	0.141	0.142	0.143	0.143
	50	0.108	0.109	0.110	0.110	0.109	0.110

Test Property	Compression Force (psi)	Ultra Low Temp (-60°C)					
		Initial	100hrs	200hrs	300hrs	400hrs	400hrs
Thermal Resistance	10	0.223	0.222	0.223	0.223	0.224	0.223
	30	0.140	0.141	0.142	0.142	0.143	0.141
	50	0.108	0.111	0.109	0.110	0.109	0.110

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