LiPOLY®
SHIU LI TECHNOLOGY CO.,LTD

DTT61-s

Immersion Cooling Thermal Conductive Pad

LiPOLY DTT61-s is a thermal pad designed for immersion cooling environments, suitable for high-power AI chips operating under long-duration conditions and capable of use in cooling fluids. Compared to conventional thermal interface materials, DTT61-s is specifically engineered for immersion cooling systems and can maintain its material integrity and thermal performance during prolonged operation, making it suitable for high heat-load AI server environments. The product supports room-temperature storage and transportation, and is well-suited for applications in immersion cooling architectures.

FEATURES

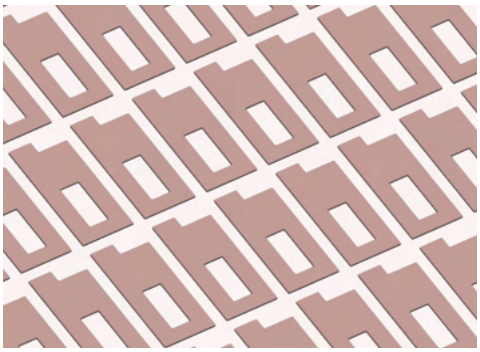
/ Thermal conductivity: 6.0 W/m*K
/ Designed for immersion cooling environments with excellent coolant compatibility for long-term submersion
/ Highly flexible to effectively fill inter face gaps and compensate for manu facturing tolerances
/ Water-resistant with strong electrical insulation for enhanced system safety
/ Maintains material integrity and stable performance during long-term operation
/ Supports room-temperature storage and transport; ideal for high heat flux AI server applications

TYPICAL APPLICATION

/ AI GPU modules and in-house ASICs (NVIDIA / AMD)
/ AI immersion-cooled servers and liquid
/ hybrid cooling systems
/ High-power accelerator cards and high-performance computing (HPC) systems
/ Industrial servers and edge computing platforms
/ EV, green energy, and high-power electronic modules (including power modules, power amplifiers, and telecom/5G applications)

SPECIFICATIONS

/ Roll form / Sheet form
/ Die-cut parts



TYPICAL PROPERTIES

PROPERTY	DTT61-s	TEST METHOD	UNIT
Color	Red	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm³
Application temperature	-60~200	-	°C
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	4	ASTM D5470 modify	%
Deflection @20 psi	5	ASTM D5470 modify	%
Deflection @30 psi	8	ASTM D5470 modify	%
Deflection @40 psi	14	ASTM D5470 modify	%
Deflection @50 psi	19	ASTM D5470 modify	%
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	$>10^{11}$	ASTM D257	Ohm
Volume resistivity	$>10^{10}$	ASTM D257	Ohm-m
Thermal Conductivity	6.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.387	ASTM D5470	°C-in²/ W
Thermal impedance@20 psi	0.375	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.356	ASTM D5470	°C-in²/ W
Thermal impedance@40 psi	0.333	ASTM D5470	°C-in²/ W
Thermal impedance@50 psi	0.317	ASTM D5470	°C-in²/ W

Thermal Impedance vs. Pressure vs. Deflection