



TMA-3010

Silicone Thermal Conductive Pad



Description

TMA-3010 thermal conductive pad is a kind of mixture made by silicone rubber and filled with high performance ceramic particles. Having good insulation and thermal conductive performance. The characteristics of TMA-3010 are having higher compressibility and lower thermal resistance.

Characteristic

- No hazardous substances, High insulation, Good flame resistant, Resistance to high and low temperature
- Cost-effective, easy to process
- Excellent thermal conductivity, can be used between the heat source and the cooling surface device

Application

- Various chips
- Network communication equipment
- Smart phone
- Computer, server
- On-board electronic equipment
- Power radiator

Specification (3.0 W/m.K)

Properties		Unit	TMA-3010	Test Standard
Color		/	Grey	Visual Inspection
Specific Gravity		g/cm ³	3.1	ASTM D792
Thickness (±10%)		mm	0.7-2.0	ASTM D374
Thermal Conductivity		W/m.K	3.0	ASTM D5470 Modify
Thermal resistance@20psi 1.0mm		°C.in ² /W	0.42	ASTM D5470 Modify
Compression Rate@20psi 1.0mm		%	32	—
Hardness (±5)		Shore OO	35	ASTM D2240
Dielectric Strength		KV/mm	11	ASTM D149
Dielectric Constant	50Hz	/	7.4	ASTM D150
	1KHz	/	7.0	
	1MHz	/	6.8	
Volume Resistivity		Ω.cm	10 ¹¹	GB/T 1410
Flammability Class		/	V0	UL94
Application Temperature		°C	-40~+150	—
Self-adhesive		/	Double-sided Adhesive	—

Note : 1. Single-sided Adhesive : TMA-3010X.

2. The above data is obtained only under the conditions of our laboratory. The result may be biased due to different test conditions, equipment and environment.

Edition:M11



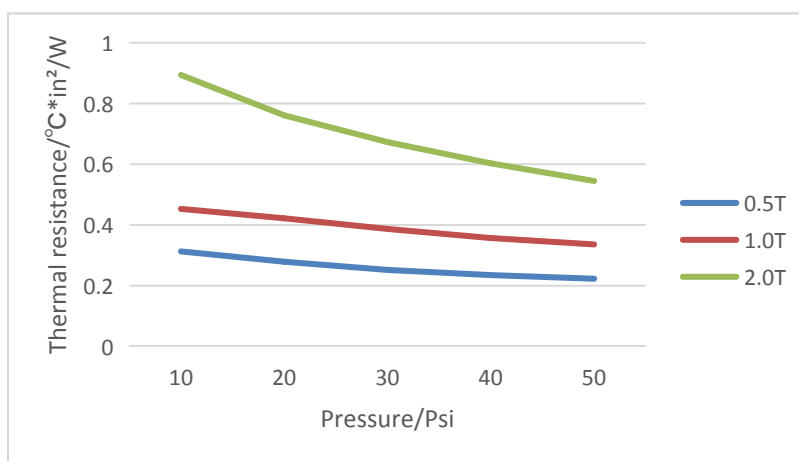
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TMA-3010 Relationship between thermal resistance and pressure

Pressure /Psi	TMA-3010 thermal resistance($^{\circ}\text{C}\cdot\text{in}^2/\text{W}$)		
	0.5T	1.0T	2.0T
10	0.313	0.453	0.894
20	0.279	0.422	0.761
30	0.252	0.387	0.673
40	0.235	0.357	0.603
50	0.223	0.336	0.545



TMA-3010 Relationship between compression ratio and pressure

Pressure /Psi	TMA-3010 compression ratio(%)		
	0.5T	1.0T	2.0T
10	14.36	22.23	25.35
20	21.73	31.97	36.50
30	27.82	38.70	45.45
40	33.64	44.69	52.30
50	38.36	48.97	57.90

