### TECHNICAL DATA SHEET

# **Thermally Conductive Pads**

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## My-T-Therm 1200, 1500 TCP

- My-T-Therm 1200,1500 TCP thermal pad is a thermally conductive, electrically insulating gap-filling material, specially designed for heat transfer through gaps. By filling the air gap, a continuous heat conduction path is formed to transfer the heat of the heat-generating component to the heat sink.
- My-T-Therm 1200,1500 TCP comes with natural adhesive on both sides, eliminating the need for thermally impeding adhesive layers.

#### Features & Benefits

- Good thermal performance, electrical insulation
- > High temperature resistance
- Self-adhesive, easy assembly, reworkable
- Wide range of thickness, canfill any uneven size gap
- Replace the volatile pollution of the thermal greasep

## **Typical Applications**

- Computer
- Communication equipment
- Switching power supply
- Flat-panel TV
- > Security equipment
- New energy vehicles / power batteries
- Car equipment / charger
- PC server / workstation
- Optical drive / COMBO
- > Any heating element and radiator

## **Physical Properties**

Test Item	Test Method	Unit	1200 TCP	1500 TCP
Color	Visual	-	Off white/Blue	Off white/Blue
Thickness	ASTM D374	mm	0.25~20.0	0.25~20.0
Hardness	ASTM D2240	Shore00	40~80	40~80
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	2.2	2.25
Tensile Strength	ASTM D412	MPa	0.34	0.32
Elongation	ASTM D412	%	100	65
Tear Strength	ASTM D624	KN/m	1.4	1.0
Breakdown Voltage	ASTM D149	KV/mm	≥10	≥10
Volume Resistivity	ASTM D257	Ω·cm	8×10 <sup>12</sup>	5×10 <sup>12</sup>
Continuous Use Temp	EN344	°C	-40~180	-40~180
Flame Rating	UL 94	-	V-0	V-0
Weight Loss	@150°C240H	%	≤0.5	≤0.5
Dielectric Constant	ASTM D150	@1MHz	5.41	5.55
Thermal Conductivity	ISO 22007	W/m-K	1.2	1.5

## **Configurations Available**

200\*400mm, 300\*400mm; Die cut-part

# My-T-Therm 2000, 3000, 4000 & 5000 TCP

- My-T-Therm 2000,3000.4000 & 5000 TCP is high-performance thermal pad is a soft and compliant gap filling material
- Natural tack and its softness make the pad more effectively fill the air gap, comprehensively improving the thermal performance. It is idealfor high-performance applications

### Features & Benefits

- High thermal performance, low thermal impedance
- Soft and flexible, reducing the interface thermal resistance
- High electrical insulation to protect electronic devices
- Naturally-inherent tack, easy assembly, reworkable
- ➤ ROHS,UL compliant

### **Typical Applications**

- New energy vehicles
- > High thermal conductivity module
- Microprocessors, memory chips, graphics processors
- Network communication equipment
- Car equipment, charger
- ➤ High-speed hard disk drive

## **Physical Properties**

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Test Item	Test Method	Unit	2000 TCP	3000 TCP	4000 TCP	5000 TCP
Color	Visual	-	Blue/Gray	Blue/Gray	Gray	Gray
Thickness	ASTM D374	mm	0.25~10.0	0.25~10.0	0.3~5.0	0.3~5.0
Hardness	ASTM D2240	Shore00	40~80	40~80	60~80	60~80
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	2.27	3	3.24	3.32
Tensile Strength	ASTM D412	Мра	0.20	0.19	0.14	0.2
Elongation	ASTM D412	%	60	40	32	60
Tear Strength	ASTM D624	KN/m	0.65	0.9	0.7	0.5
Breakdown Voltage	ASTM D149	KV/mm	≥10	≥10	≥7	≥7
Volume Resistivity	ASTM D257	Ω·cm	1×10 <sup>13</sup>	1×10 <sup>12</sup>	1×10 <sup>13</sup>	2×10 <sup>13</sup>
Continuous Use Temp	EN344	°C	-40~200	-40~200	-40~200	-40~220
Flame Rating	UL 94	-	V-0	V-0	V-0	V-0
Weight Loss	@150°C240H	%	≤0.3	≤0.3	≤0.5	≤0.5
Dielectric Constant	ASTM D150	@1MHz	5.8	7.0	6.75	7.92
Thermal Conductivity	ISO 22007	W/m-K	2.0	3.0	4.0	5.0

## **Configurations Available**

200\*400mm,300\*400mm; Die cut-part;

## My-T-Therm 6000, 7000, 8000 & 9000 TCP

- My-T-Therm 6000,7000,8000 & 9000 TCP is an ultra-high performance thermal pad that acts as an excellent thermal interface and electrical insulator between electronic components and heat sinks. Its softness and elasticity characteristics enable it to be used for covering a veryuneven surface. Heat is transferred from the separation device or the entire PCB to the metal casing or diffuser to improve heat dissipation and improve the efficiency of heating electronic components and service life.
- TCP 6000-9000 thermal pad is supplied with natural tack, allowing for excellent compliance to the adjacent surfaces of components, greatly reducing theinterface thermal impedance

### Features & Benefits

- Ultra-high thermal performance, low thermal impedance
- Soft and flexible, reducing the interface thermal impedance
- High electrical insulation to protect sensitive electronic devices
- Naturally-inherent tack, easy assembly, reworkable
- ROHS, UL compliant, environmental protection

## **Typical Applications**

- > Automotive engine control module
- > CPU, memory module
- Communication hardware equipment
- High-speed hard disk drive
- Microprocessors, memory chips, graphics processors
- Military electronic equipment

## **Physical Properties**

Test Item	Test Method	Unit	6000 TCP	7000 TCP	8000 TCP	9000 TCP
Color	Visual	-	Gray	Gray	Gray	Gray
Thickness	ASTM D374	mm	0.5~5.0	0.5~5.0	0.5~5.0	0.75~5.0
Hardness	ASTM D2240	Shore00	60~80	60~80	60~80	60~80
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	3.43	3.5	3.55	3.6
Tensile Strength	ASTM D412	Mpa	0.22	0.15	0.15	0.15
Elongation	ASTM D412	%	16	24	24	25
Tear Strength	ASTM D624	KN/m	0.5	0.5	0.5	0.5
Breakdown Voltage	ASTM D149	KV/mm	≥7	≥7	≥7	≥7
Volume Resistivity	ASTM D257	Ω·cm	2×10 <sup>13</sup>	3×10 <sup>11</sup>	3×10 <sup>11</sup>	3×10 <sup>11</sup>
Continuous Use Temp	EN344	°C	-40~220	-40~220	-50~220	-50~ 220
Flame Rating	UL 94	-	V-0	V-0	V-0	V-0
Weight Loss	@150°C240H	%	≤0.5	≤0.5	≤0.5	≤0.5
Dielectric Constant	ASTM D150	@1MHz	7.47	8.0	8.0	10.0
Thermal Conductivity	ISO 22007	W/m-K	6.0	7.0	8.0	9.0

## **Configurations Available**

200\*400mm,300\*400mm; Die-cut part.

### Handling precautions

❖ For safe handling it must be handled in a manner as indicated in Material Safety Data Sheet (MSDS) and in compliance with relevant local regulations.

## Storage

- ❖ Store Product My-T-Therm Thermally Conductive Pads in a cool, dry location at a temperature of 25±2 °C unless otherwise labeled.
- ❖ My-T-Therm Thermally Conductive Pads will exhibit a shelf life of 12 months when stored in above mentioned conditions.
- For further specific information, contact our technical service center R&D Center.

#### Pack Size

My-T-Therm Thermally conductive Pads are available in customizable sheet form and die cut-part sizes.

### Note

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