



Silicone-Free Thermally Conductive Material

SY-AP300

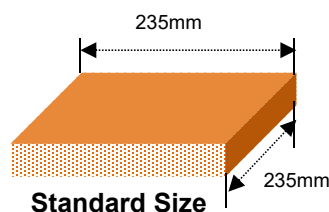
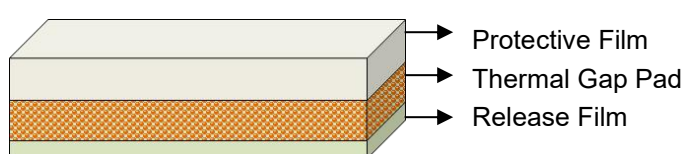
Technical Data Sheet

Version Number: A-c

❖ Product Introduction

AP300 is a special interface filling material with high thermal conductivity which is made of acrylic resin by special formula and process. Low interfacial thermal resistance can be achieved at relatively low pressure. It can be used between heating power devices and radiating aluminum sheets or shell to effectively eliminate the air, which can reduce air contact thermal resistance and achieve effective filling effect.

❖ Product Structure



❖ Product Performance

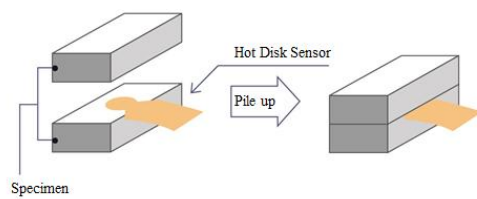
- Good thermal conductivity and low thermal resistance;
- Soft, low stress, good filling effect, and no damage to components;
- Good surface stickiness, good adhesion with components;
- No silicone oil precipitation, suitable for silicone oil sensitive occasions.

❖ Features

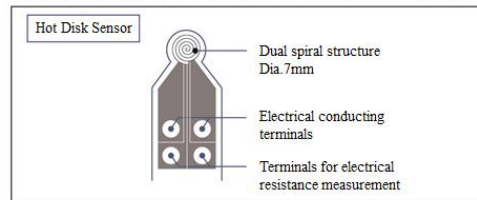
PROPERTIES	SPECIFICATIONS	TEST STANDARD
Color	White	Visual Inspection
Thickness (mm)	1.0~4.0	ASTM D374
Density (g/cm ³)	2.20±0.2	ASTM D792
Hardness (Shore OO)	65±7	ASTM D2240
Volume Resistivity (Ω·cm)	≥1.0×10 ¹⁰	ASTM D257
Surface Resistivity (Ω)	≥1.0×10 ¹¹	ASTM D257
Dielectric Strength@1mm (kV/mm)	≥6.5	ASTM D149
Tensile Strength (MPa)	≥0.10	ASTM D412
Elongation (%)	≥100	ASTM D412
Flame Rating (UL94)	V-0	UL94
Thermal Conductivity W/(m·k)	3.0±0.3	ISO 22007-2:2008
	3.0±0.3	ASTM D5470
Service Temperature (°C)	-40~120	Saintyoo TM

Remarks: The hardness above is the value of 4mm sample.

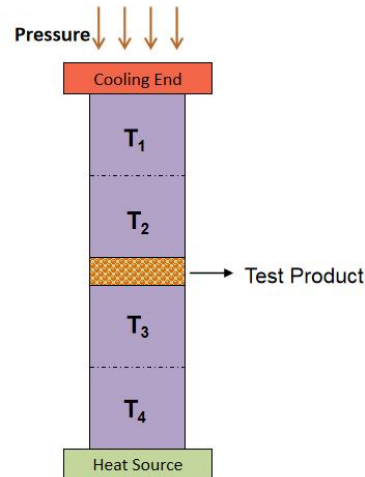
Thermal Conductivity Test Method



Thermal conductivity is calculated by software for calculation

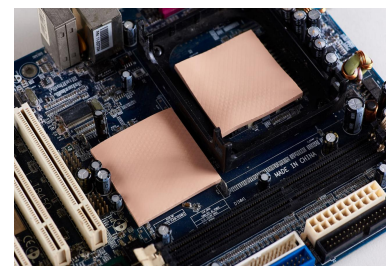
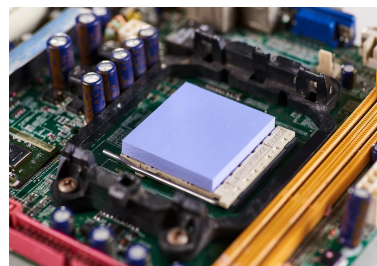
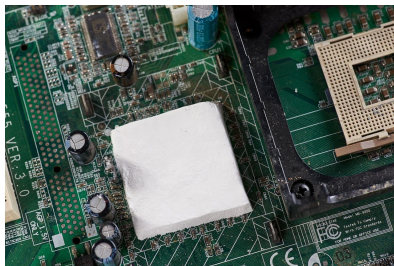


Sample dimension is 25.4*25.4*4mm.



Product Application

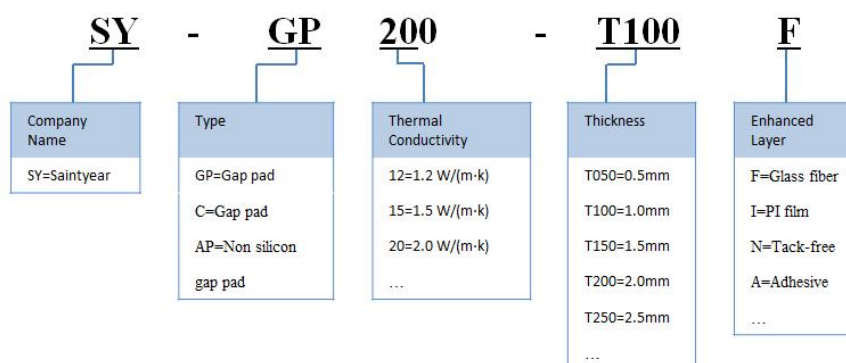
The product is widely used in new energy vehicles, automotive batteries and charging equipment, hand-held consumer electronics, portable and desktop computers, electronic communication equipment, servers, network terminals, security equipment, optical communications-equipment, LED lighting equipment, automotive batteries and charging equipment and other electronic products between heating devices and heat radiation aluminum sheet or shell filling and heat conduction etc.



Duration and Storage Condition

- Best if Used Before: 6 months
- Best Storage Condition: 15°C~35°C/0~65%RH in packing case.

Naming Rules



Special Declaration: We suggest user do adaptability test before the formal use of this product. Due to the diversity of practical application, our company do not guarantee that the problem appear in a specific condition, thus our company will not be responsible for any direct, indirect or accidental damage. You can contact my company's after-sales service when problems encountered in the use, we will try to help you.