



# 深圳市鸿富诚屏蔽材料有限公司

SHENZHEN HFC SHIELDING PRODUCTS CO., LTD

无硅导热垫片

Silicon Free Thermal Pad

## 1. 产品系列 Product Series: H200-SF、H300-SF

## 2. 产品描述 Description:

无硅导热垫片是以亚克力胶为基体，加入导热填料固化成型的导热材料，具有良好的绝缘性、优异的耐老化性、高柔顺性、良好的自粘性，即使长时间使用也不会有渗油，特别适用于硅油敏感场合，因此被广泛应用于高灵敏度探头、高清摄像头等高端电子电器行业。

Silicone Free Thermal pad is a curing molding material with carrier of acrylic adhesive and filled with thermal material. It has good insulating properties, excellent resistance to aging, high flexibility and good self-adhesive, even after prolonged use would not be oil leakage. Especially suitable for the silicone oil sensitive situation, therefore they are widely used in high-end electronic industry such a high sensitivity detector and high-definition cameras.

## 3. 性能参数 Properties :

项目 Items	性能指标 Value		检测仪器 Test Instrument	检测标准 Test Method
	H200-SF	H300-SF		
颜色 Color	灰白色 Gray White	灰白色 Gray White	目视 Visual	--
厚度(mm) Thickness	0.5~3	0.5~3	PEACOCK 厚度规 PEACOCK THICKNESS METER	ASTM D 374
规格 Specification	根据客户要求 Can be Custom-made	根据客户要求 Can be Custom-made	数显卡尺 DIGITAL CALIPER	ASTM D 5947
密度(g/cc) Density	2.7±0.5	2.9±0.5	ZMD-2 电子密度仪 ZMD-2 ELECTRONIC DENSIMETER	ASTM D 792
硬度(Shore C) Hardness	35~50(±5)	35~50(±5)	LX-C 型微孔材料硬度计 LX-C CELLULAR MATERIAL DUROMETER	ASTM D 2240
初粘性 Tack	6±1	5±1	PH-520 初粘性测试仪 PH-520 TACK TESTER	GB/T 4852-2002
导热系数(W/m·K) Thermal Conductivity	2.0±0.2	3.0±0.25	LW-9389 导热系数测试仪 LW-9389 THERMAL CONDUCTIVITY TESTER	ASTM D 5470
热阻(°Cin <sup>2</sup> /W) (@20psi&1mm) Thermal Resistance	≤0.7	≤0.6	LW-9389 导热系数测试仪 LW-9389 THERMAL CONDUCTIVITY TESTER	ASTM D 5470
击穿电压 KV (@1mm) Breakdown Voltage	≥8	≥8	MS2676A 耐压测试仪 MS2676A WITHSTAND VOLTAGE TESTER	ASTM D 149
体积电阻率(Ω.cm) Volume Resistivity	≥10 <sup>8</sup>	≥10 <sup>8</sup>	ZC-36 高绝缘电阻测量仪 ZC-36 HIGH DIELECTRIC RESISTANCE TESTER	ASTM D 257
压缩比(%) (@50psi) Compression Ratio	≥25	≥25	HY939CS 压缩力测试仪 HY939CS COMPRESSIVE FORCE TESTER	ASTM D 575
拉伸强度(MPa) Tensile Strength	≥0.15	≥0.15	HY939CS 拉力试验机 HY939CS TENSION TESTER	ASTM D 412
延伸率(%) Elongation	≥80	≥80		
介电常数(@1MHz) Dielectric Constant	≥2	≥2	WY2851D 数显 Q 表 WY2851D DIGITAL Q METER	ASTM D 150
介质损耗 Dielectric Loss	≤0.1	≤0.1		
防火性能 UL Certify	UL94V0	UL94V0	MY-6226-C1 阻燃测试仪 FLAME RATING TESTER	UL 94
挥发份 Volatile matter	0.04	0.04	--	--
使用温度(°C) Operating Temperature	-40~150	-40~150	XB-OTS-150D-C 可程式冷热冲击箱 PROGRAMMABLE THERMAL SHOCK TESTER	IEC 60068-2-14

#### 4. 产品特点:

- 完全不含硅成分
- 高导热性能
- 柔韧性好, 强度高, 回弹性好

#### 5. 应用领域:

- 移动电子设备
- 微处理器及芯片
- 汽车引擎控制单元
- 笔记本电脑
- 无线通讯硬件产品

#### Features:

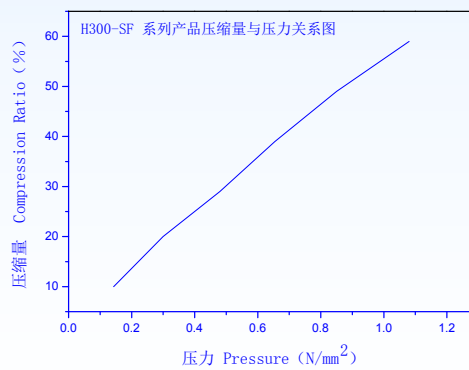
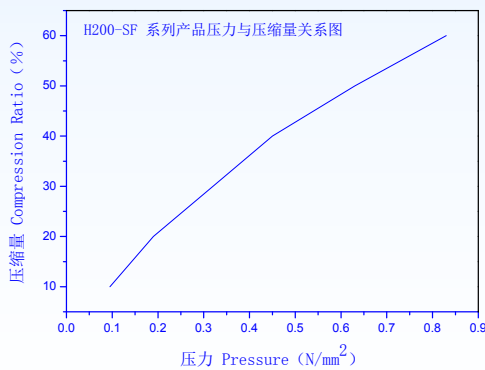
- Without silicon components
- High thermal conductivity property
- Good flexibility, high strength and high elastic Good

#### Applications:

- Mobile electronic equipment
- Microprocessors and chips
- Automotive engine control unit
- Laptop
- Wireless communication hardware products

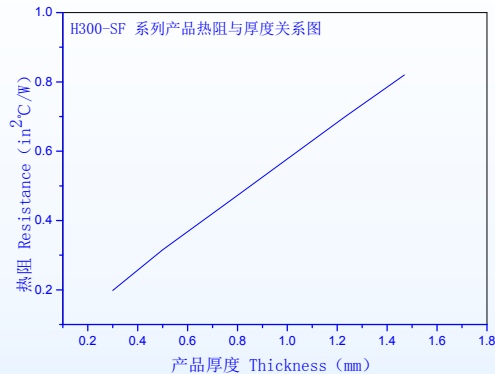
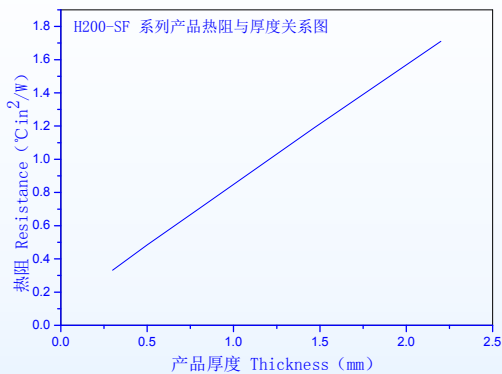
#### 6. 性能关系图 Performance Diagram:

- (1) 产品压缩量与压力关系图, 测试产品为 H200Y35@3mm/H300S35@3mm, 不同厚度和不同硬度产品会略有差异。  
Compress Ratio vs. Pressure diagram, Tested by H200Y35@3mm/H300S35@3mm, different thickness and hardness will be slightly affected test results.



- (2) 产品热阻与厚度关系图。

Thermal Resistance vs. Thickness diagram.



#### 7. 产品规格 Specification :

长宽尺寸: 200mm×400mm 可根据要求定制。

产品厚度: 0.5mm-3mm 可满足不同客户需求。

Dimension: 200mm×400mm, can be customer-made..

Thickness: Various thicknesses for option, Available from 0.5mm to 3mm.

#### 8. 产品公差 Tolerance :

厚度公差 Thickness(mm):  $0.5 \leq H < 1 \pm 0.1$ ;  $1 \leq H < 1.5 \pm 0.15$ ;  $1.5 \leq H < 2 \pm 0.2$ ;  $2 \leq H < 2.5 \pm 0.25$ ;  $H > 2.5 \pm 10\%$

#### 9. 环保要求 Environmental Request:

该系列产品符合 ROHS、卤素管控标准。

The series of products accord with standers of ROHS and HALOGEN.

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