

导热矽胶布 Thermally Conductive Insulators

H100-ISP系列产品是高效绝缘产品，它也具备导热性能。它是将绝缘性的硅胶基材加入到导热材料当中去，从而达到既能绝缘又能导热的效果。

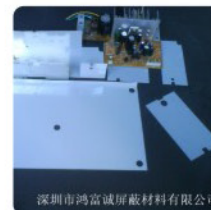
H100-ISP series products are the high-efficiency insulation ones with thermal conductive properties. The supplement of the insulation base film made by silica gel into the high-conductive material creates a great effect on both the insulation and heat conduction.

产品特征：

- 表面较柔软，良好的导热率
- 良好传导率，良好电介质强度
- 高压绝缘，低热阻
- 抗撕裂，抗穿刺

Features

- Highly compliant surface characteristic with high thermal conductivity
- High thermal conductive and High dielectric strength
- Low thermal resistance with high voltage isolation
- Resistant to tears and punctures



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典型应用：

- 电力转换设备
- 功率半导体器件: TO集成块 MOSFETs&IGBTs
- 视听产品
- 汽车控制装置
- 电动机控制设备
- 普通高压接合面

Applications

- Power conversion equipment
- Power semiconductors: TO packages MOSFETs&IGBTs
- Audio and Video
- Components
- Motor controllers
- General high pressure interface



性能指标 Performance

Product Name	产品名称	H100-ISP01	H100-ISP02	H100-ISP03	H100-ISP04	测试标准 Test Method
Physical Properties 物理性能						
Color 颜色		Grey 灰色				Visual
Construction & Composition 结构 & 成分		Ceramic filled with silicone elastomer 陶瓷粉体填充硅胶弹性体				/
Thickness(mm) 厚度(mm)		0.23, 0.3, 0.45				ASTM 2240
Specific Gravity(g/cm ³) 比重 (g/cm ³)		1.75				ASTM D297
Heat Capacity(g.K) 热容积(g.K)		1.0				ASTM C351
Hardness(shore A) 硬度(shore A)		50				ASTM D751
Tensile Strength(psi) 拉伸强度(psi)		425				ASTM D412
Operating Temp 使用温度范围(°C)		-50~180				/
Electric Properties 电性能						
Dielectric Breakdown Voltage (KV) 击穿电压(KV)		> 3.5				ASTM D149
Dielectric Constant(MHz) 介电常数(MHz)		5.5				ASTM D150
Volume Resistivity (Ω.cm) 体积电阻率 (Ω.cm)		3.5x10 ¹¹				ASTM D257
Flame Rating 阻燃等级		94 V-0				Equivalent UL
Thermal Properties 热性能						
Thermal Conductivity (W/m.k) 导热系数 (W/m.k)		1.0				ASTM D5470
Thermal Impedance @50psi(°C.in ² /W) 热阻@50psi (°C.in ² /W)		1.52, 2.35, 3.45				ASTM D5470

H100-ISP系列标准尺寸为306mm*40.6M，可模切成不同形状。

Standard Sizes: 12" × 160" (304mm × 40.6M) Can be custom-made. All above data is copyrighted and elaborated by HFC.

H160-ISP系列产品是高效绝缘产品，它也具备导热性能。它是将绝缘性的硅胶基材加入到导热材料当中去，从而达到既能绝缘又能导热的效果。

H160-ISP series products are the high-efficiency insulation ones with thermal conductive properties. The supplement of the insulation base film made by silica gel into the high-conductive material creates a great effect on both the insulation and heat conduction.

产品特征：

- 表面较柔软，良好的导热率
- 良好传导率，良好电介质强度
- 高压绝缘，低热阻
- 抗撕裂，抗穿刺

Features

- Highly compliant surface characteristic with high thermal conductivity
- High thermal conductive and High dielectric strength
- Low thermal resistance with high voltage isolation
- Resistant to tears and punctures

典型应用：

- 电力转换设备
- 功率半导体器件: TO集成块 MOSFETs & IGBTs
- 视听产品
- 汽车控制装置
- 电动机控制设备
- 普通高压接合面

Applications

- Power conversion equipment
- Power semiconductors: TO packages MOSFETs & IGBTs
- Audio and Video
- Components
- Motor controllers
- General high pressure interface

性能指标 Performance

Product Name	产品名称	H160-ISP01	H160-ISP02	H160-ISP03	H160-ISP04	H160-ISP05	测试标准 Test Method
Physical Properties 物理性能							
Color	颜色	Grey 灰色					Visual
Construction & Composition	结构与成分	Ceramic filled silicone elastomer 陶瓷粉体填充硅胶弹性体					/
Thickness(mm)	厚度(mm)	0.152	0.203	0.254	0.304	0.457	ASTM 2240
Specific Gravity(g/cm ³)	比重 (g/cm ³)	2.2					ASTM D297
Heat Capacity(g.K)	热容积(g.K)	11					ASTM C351
Hardness(shore A)	硬度(shore A)	50					ASTM D751
Tensile Strength(psi)	拉伸强度(psi)	450	> 600	> 600	> 600	> 600	ASTM D412
Operating Temp	使用温度范围(°C)	-50~180					/
Electric Properties 电性能							
Dielectric Breakdown Voltage (KV)	击穿电压(KV)	> 1.5	> 3.5	> 5	> 5	> 5	ASTM D149
Dielectric Constant(MHz)	介电常数(MHz)	5.5					ASTM D150
Volume Resistivity (Ω.cm)	体积电阻率 (Ω.cm)	5.0*10 ¹¹					ASTM D257
Flame Rating	阻燃等级	94 V-0					equivalent UL
Thermal Properties 热性能							
Thermal Conductivity (W/m.k)	导热系数 (W/m.k)	1.6					ASTM D5470
Thermal Impedance @50psi (°C.in ² /W)	热阻@50psi (°C.in ² /W)	0.21	0.35	0.82	1.23	1.83	ASTM D5470

H160-ISP系列标准尺寸为203*406mm，可模切成不同形状。

Standard Sizes: 8" × 16" (203mm × 406mm) Can be custom-made. All above data is copyrighted and elaborated by HFC.

