

常规导热垫片

Thermal Pad Common Series

产品介绍

PRODUCT INTRODUCTION

常规导热垫片是一种柔性且具备一定压缩性的导热弹性体。其能够填充缝隙，将发热器件的热量快速导出。导热垫片具有一定微粘性，无需背胶，贴装方面。

The common thermal pads are soft which could be compressed in moderate range. It can fill the gap and quickly conduct heat. The thermal pads are inherent tacky and easy for use without back adhesive.



产品特点

PRODUCT FEATURE

- 柔软，具有微粘性，易于安装
- 导热性能十分优异
- 多种尺寸可选，可根据图纸裁切
- Soft, slightly sticky, easy to install
- Excellent thermal conductivity
- Various dimension available, can be tailor-made according to drawing

典型应用

TYPICAL APPLICATION

- 汽车电子
- Automotive electronics
- 工业伺服、变频器
- Industrial servo, frequency converter
- 医疗
- Medical industry
- 家电
- Household electrical appliances
- 手机、电脑、电视
- Mobile phone, computer, TV

产品参数

PRODUCT PARAMETER

产品型号 Product Name	厚度 Thickness	导热系数 Thermal Conductivity	密度 Density	硬度 Hardness	介电常数 Dielectric Constant	体积电阻率 Volume Resistivity	使用温度 Application Temperature	阻燃等级 Flammability Rating	保质期 Shelf Life
	mm	W/m.K	g/cm ³	Shore 00	@1MHz	$\Omega \cdot \text{cm}$	°C	UL-94	month
STP 200	0.5~10.0	2	2.40	60	3.6	$1.0 \cdot 10^{13}$	-40 ~ 150	V-0	24
STP 300	0.5~5.0	3	2.82	60	6.1	$3.8 \cdot 10^{13}$	-40 ~ 150	V-0	24
STP 500	0.5~5.0	5	3.30	60	6.6	$1.8 \cdot 10^{13}$	-40 ~ 150	V-0	24
STP 600	0.5~5.0	6	3.40	55	5.2	$1.0 \cdot 10^{13}$	-40 ~ 150	V-0	24
STP 800	0.5~5.0	8	3.50	65	4.1	$2.3 \cdot 10^{12}$	-40 ~ 150	V-0	24
STP 1000	0.5~5.0	10	3.20	65	6.5	$1.0 \cdot 10^{13}$	-40 ~ 150	V-0	24
STP 1200	0.5~5.0	12	3.00	65	7.9	$1.0 \cdot 10^{14}$	-40 ~ 150	V-0	24
STP 1500	0.5~5.0	15	3.10	65	7.8	$1.0 \cdot 10^{12}$	-40 ~ 150	V-0	24

超软导热垫片

Thermal Pad Ultra Soft Series

产品介绍

PRODUCT INTRODUCTION

超软导热垫片具有超低硬度，高压缩性等特点，相对于常规导热垫片具有超低的安装应力，可避免安装应力对芯片或者线路板的破坏。适合对于安装应力要求高和公差较大的场合。

Ultra soft thermal pad has the characteristics of ultra-low hardness and high compressibility. Compared with common thermal pad, it has ultra-low installation stress which can avoid the damage of installation stress to chip or circuit board. It is suitable for occasions with low compression stress and large tolerance.

产品特点

PRODUCT FEATURE

- 高压缩性, 低安装应力
- 更低的接触热阻
- 适应更大的公差场合
- High compressibility, low installation stress
- Lower contact thermal resistance
- Adapt to larger tolerance scenario

典型应用

TYPICAL APPLICATION

- 汽车电子
- Automotive electronics
- 家电
- Household electrical appliances
- 可穿戴设备
- Wearable devices
- 装配应力敏感芯片
- Stress sensitive chip
- 公差较大环境
- Environment with large tolerance

产品参数

PRODUCT PARAMETER

产品型号 Product Name	厚度 Thickness	导热系数 Thermal Conductivity	密度 Density	硬度 Hardness	介电常数 Dielectric Constant	体积电阻率 Volume Resistivity	使用温度 Application Temperature	阻燃等级 Flammability Rating	保质期 Shelf Life
	mm	W/m.K	g/cm ³	Shore 00	@1MHz	Ω·cm	℃	UL-94	month
STP 200 S	0.5~5.0	2.1	2.44	40	3.6	1.0*10 ¹⁵	-40 ~ 150	V-0	24
STP 300 S	0.5~10.0	3	2.80	40	5.2	1.0*10 ¹²	-40 ~ 150	V-0	24
STP 500 S	0.5~10.0	5	3.30	45	6.4	1.0*10 ¹⁵	-40 ~ 150	V-0	24
STP 800 S	0.5~5.0	8	3.50	40	4.5	5.9*10 ¹²	-40 ~ 150	V-0	24

低挥发/低出油导热垫片

Thermal Pad Low Oil-bleeding / Low Volatile Series

产品介绍

PRODUCT INTRODUCTION

低出油低挥发系列是采用特殊材料和工艺制成；具有极低的小分子挥发性、良好的导热性、高压缩性、超级柔软和高回弹性；兼具良好的绝缘性，非常适合用于安防监控、投影、车载电子设备、镜头、激光设备等对低分子挥发有限制的场景。

LOVO series is made of special materials and technology; It has very low volatility of small molecules, good thermal conductivity, high compression rate, superior softness and resilience; With good electric insulation, it is very suitable for CCTV, projection, auto-electronics, optical lens, laser equipment and other scenarios with restrictions on low molecular volatilization/oil-bleeding.

产品特点

PRODUCT FEATURE

- 极低挥发、极低的硅氧烷含量
- 低游离硅油含量
- 绝缘性、阻燃性优异
- 高回弹性
- Very low volatile, very low siloxane content
- Low free silicone oil
- Excellent insulation and flame retardancy
- High resilience

典型应用

TYPICAL APPLICATION

- 摄像头、监控
- Camera, surveillance
- 发光二极管
- LED
- 光学仪器
- Optical instrument
- 显示器件
- Display device
- 光通信
- Optical communication

产品参数

PRODUCT PARAMETER

产品型号 Product Name	厚度 Thickness	导热系数 Thermal Conductivity	密度 Density	硬度 Hardness	介电常数 Dielectric Constant	体积电阻率 Volume Resistivity	使用温度 Application Temperature	阻燃等级 Flammability Rating	渗油率 Oil Bleeding	挥发性 Volatility	保质期 Shelf Life
	mm	W/m.K	g/cm ³	Shore 00	@1MHz	Ω·cm	℃	UL-94	%, 压缩 50%, 72h@125℃	1000h@85℃	month
STP400 LOVO	0.5~8.0	4	3.16	60	5.9	1.5*10 ¹⁴	-40 ~ 200	V-0	<1	无挥发冷凝物	24
STP600 LOVO	0.5~5.0	6	3.30	65	6.57	1.5*10 ¹³	-40 ~ 150	V-0	<1	无挥发冷凝物	24
STP700S LOVO	1.0~5.0	7	3.40	40	6	1.0*10 ¹³	-40 ~ 150	V-0	<1	无挥发冷凝物	24
STP800 LOVO	0.5~5.0	8	3.40	65	5.5	3.5*10 ¹²	-40 ~ 150	V-0	<1	无挥发冷凝物	24

高回弹导热垫片

High Rebound Thermal Pad

产品介绍

PRODUCT INTRODUCTION

高回弹导热垫片是指有机硅树脂利用特殊的配方及工艺制成的具有高导热性能、高回弹的特殊界面填充材料。在相对较低的压力下便可以实现低界面热阻性能,应用于发热功率器件与散热器或机壳间,可以有效排除空气,降低空气的接触热阻,达到有效的填充效果,并且高强度,不易破损。

High rebound thermal pad is a silicone-based thermal interface material with high thermal conductivity and low compression set.

Low interface thermal resistance can be achieved at relatively low compression force. It was applied between heat source and heatsink/casing to reduce the contact thermal resistance by replacing air. High strength and rebound provides super reliability avoiding of crack and pump-out.

产品特点

PRODUCT FEATURE

- 良好的导热率,低热阻
- 材料柔软,低应力,良好的填充效果,对元器件无损伤
- 高强度、高回弹性、可靠性佳
- Good thermal conductivity and low thermal resistance
- Soft, low stress, good filling effect and no damage to components
- High strength, high rebound, and super reliability

典型应用

TYPICAL APPLICATION

- 电子通讯设备
- 平板显示器
- 车用电子产品
- 新能源汽车
- Telecomm equipment
- Flat panel displays
- Automotive electronics
- New energy vehicles

产品参数

PRODUCT PARAMETER

产品型号 Product Name	厚度 Thickness	导热系数 Thermal Conductivity	密度 Density	硬度 Hardness	回弹率 Compression Resilience Ratio	介电常数 Dielectric Constant	体积电阻率 Volume Resistivity	使用温度 Application Temperature	阻燃等级 Flammability Rating	保质期 Shelf Life
	mm	W/m.K	g/cm ³	Shore 00	%	@1MHz	Ω·cm	℃	UL-94	month
STP 150 HR	0.5~10.0	1.5	2.60	30	90	4	1*10 ¹³	-40 ~ 150	V-0	24
STP 300 HR	0.5~10.0	2.7	2.90	40	90	4.54	1*10 ¹³	-40 ~ 150	V-0	24
STP 301 HR	0.5~10.0	2.7	2.90	60	90	4.34	1*10 ¹²	-40 ~ 200	V-0	24

导热相变材料

Phase-change Materials



产品介绍

PRODUCT INTRODUCTION

导热相变材料是一类以相变材料为基材制成的导热材料，具有温致相变特性。使用时，当器件的工作温度超过材料的相变温度时，相变材料就会变软而填充到热源和散热器之间，相对于普通导热材料，相变材料拥有更好的润湿性，接触热阻更低，导热效果更好。

Thermally conductive phase change material is a kind of thermally conductive materials made of phase-change materials. When the working temperature of the device exceeds the phase change temperature of the material, it will become soft and be filled between the heat source and the radiator. Compared with conventional heat conducting materials, the phase change material has better wettability, lower contact thermal resistance and better heat dissipation.

产品特点

PRODUCT FEATURE

- 更好的润湿性, 较低的接触热阻
- Better wettability and lower contact thermal resistance
- 可贴片可印刷, 使用方便
- It can be mounted, printed and easy to use

典型应用

TYPICAL APPLICATION

- IGBT 模块
- IGBT module
- DC/DC 转换器
- DC/DC converter
- 无人机
- UAV
- 汽车电子
- Automotive electronics
- 缓存芯片
- Cache chip

产品参数

PRODUCT PARAMETER

产品型号 Product Name	导热系数 Thermal Conductivity	密度 Density	相变温度 Phase Transition Temperature	热阻 Thermal Resistance	介电常数 Dielectric Constant	体积电阻率 Volume Resistivity	使用温度 Application Temperature	保质期 Shelf Life
	W/m.K	g/cm ³	℃	℃·in ² /W	@1KHz/1MHz	Ω·cm	℃	month
STPh 350	3.5	2.10	45	0.028	/	1*10 ¹⁴	-40 ~ 125	12
STPh 551	5	2.60	45	0.009	/	1*10 ¹⁴	-40 ~ 125	12
STPh 800	8	2.80	45	0.007	/	2.5*10 ¹⁴	-40 ~ 125	12
STPh 960	9.6	2.85	45	0.006	/	2.1*10 ¹⁴	-40 ~ 125	12