



产品技术说明书

Product technical specification

一. 产品描述 Product Description

发泡硅胶为聚硅氧烷发泡形成的泡沫材料,保持了有机硅聚合物的优异特性,如耐高低温、抗紫外线和臭氧、耐候、绝缘、环保,兼具泡沫材料的低密度、优良吸音性、抗震性等特点。其优异的抗压缩形变、抗蠕变性能、阻燃性能、耐机械疲劳,是各类高性能密封、减震、缓冲、隔音、保护、绝缘、防火、吸音降噪等的理想材料。

Silicone Foam Tape is a foam material formed by polysiloxane foaming, which maintains the excellent characteristics of silicone polymer, such as high and low temperature resistance, ultraviolet and ozone resistance, weather resistance, insulation, environmental protection, and has the characteristics of low density, excellent sound absorption, seismic resistance, etc. of foam materials. Its excellent compressive deformation resistance, creep resistance, flame retardancy, and mechanical fatigue resistance make it an ideal material for various high-performance sealing, shock absorption, buffering, sound insulation, protection, insulation, fire prevention, sound absorption, and noise reduction.

二. 产品结构 Product structure



发泡硅胶 Foamed silicone

三. 应用领域 Application field

- ✧ 飞机/高铁/汽车/储能/电信与电气机柜/通讯设备/照明/智能设备/电缆与光纤等
Aircraft/high-speed rail/automotive/energy storage/telecommunications and electrical cabinets/communication equipment/lighting/intelligent equipment/cables and optical fibers, etc

四. 主要用途 Main Use

- ✧ 高铁减震缓冲

High speed rail shock absorption and buffering

◇ 吸音降噪

Sound absorption and noise reduction

◇ 电磁与射频屏蔽衬垫

Electromagnetic and RF shielding pads

◇ PACK 箱密封防水

PACK box sealing and waterproofing

◇ 液冷板减震

Liquid cooled plate shock absorption

◇ 室外电气衬垫

Outdoor electrical gaskets

◇ 汽车隔热

Outdoor electrical gaskets

◇ 防爆阀

Explosion proof valve

五. 产品特性 Product Features

➤ 优异的抗压缩形变、抗蠕变性能

Excellent resistance to compression set and creep

➤ 在极端温度下优异的性能

Excellent performance in extreme temperatures

➤ 满足最严格的UL 阻燃等级

Meet the most stringent UL flame retardant

➤ 耐机械疲劳

Resistance to mechanical fatigue

➤ 氧指数高、低烟、低毒

High oxygen index, low smoke, low toxicity

➤ 抗臭氧及紫外线

Resistant to ozone and ultraviolet rays ratings

六. 典型性能 Typical performance

型号Model	P57200	P57210	P57220	P57240	P57270	P57280	P57540	P57560	P57700	P57900
罗杰斯对应型号 ROGERS corresponding model	BF-2000	BF-1000	HT-870	HT-800	HT-820	HT-840				
密度 Density (g/cm ³)	0.18±0.04	0.22±0.04	0.26±0.04	0.37±0.04	0.42±0.04	0.5±0.04	0.4±0.1	0.6±0.1	0.7±0.1	0.9±0.1
25%压缩变形应力 Compression Force Deflection (kPa)	10±4	20±10	35±10	75±20	110±20	145±30	110±30	145±30	400±20	500±20
拉伸强度 Tensile Strength (MPa)	≥0.1	≥0.15	≥0.2	≥0.3	≥0.4	≥0.5	≥0.3	≥0.5	≥0.6	≥0.8
断裂伸长率 Elongation At break	≥70	≥70	≥80	≥80	≥85	≥90	≥40	≥40	≥40	≥40
压缩变100℃ Compression Set (%)	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0
吸水率 Water Absorption (%)	≤10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0	≤5.0
介电强度 Dielectric strength (kV/mm)	≥2.0	≥2.0	≥2.2	≥2.5	≥3.5	≥4.0	≥3.0	≥4.0	≥4.0	≥4.0
体积电阻率 Volume Resistivity (Ω·cm)	≥1.0*10 ¹⁴									
导热率 Thermal Conductivity W/(m·K)	0.05	0.06	0.07	0.08	0.09	0.1	-	-	-	-

以上型号的其他测试项目：

低温脆化：-55℃全部通过

环保测试：RoHS、REACH全部通过

阻燃性：全部达到V-0。

Other testing items for the above models:

Low temperature embrittlement: all pass at -55 °C

Environmental testing: RoHS and REACH all passed

Flame retardancy: all reach V-0.

七. 产品规格 Product specifications

- 厚度Thickness: 0.8 | 1.6 | 2.4 | 3.2 | 4.8 | 6.4 | 9.5 | 12.7mm
- 宽度Width: 500/600/950mm
- 或其他定制
Other customization

八. 储存及保质期 Storage and shelf life

建议存放在清洁干燥的地方，防止包装破损，避免与挥发性溶剂放在一起。存储温度为4~26℃，湿度为40~50%。

It is recommended to store them in a clean and dry place to prevent package damage and volatile solvents. The storage temperature is 4~26 °C, and the humidity is 40~50%.