Solid Silicon Sheet KB3000S Series

KB3000S silicone sheets are continuously manufactured through calendering processes. Their exceptional heat and chemical resistance enables broad applicability. These sheets deliver long-term service at 180°C, withstand 200°C+ environments for weeks while retaining elasticity, and endure instantaneous exposure exceeding 300°C.

To enhance toughness and tensile strength, composite versions incorporate fabric reinforcement cores including: Polyester fabric，Nylon mesh，Fiberglass cloth，PTFE (Teflon®) fabric.

KB3000S—Technical Data Sheet of Solid Silicone Rubber Plate

Product Model	KB3100S	KB3200S Flame-retardant	KB3300S Cryogenic Type	KB3400S High-temperature	Testing Standard
Flame Retardancy	/	V0/HF-1	/	/	UL94
Hardness ShoreA	45-60±5				ASTM D2240
Tensile Strength MPA	4.5-8.0				ASTM D412
Elongation at Break %	250-450				ASTM D412
Density g/cm³	1.15g-1.40				ASTM D1056
Specifications mm	0.5~80×500×100000				ASTM D347
Temperature℃	-55-200		-70-220	-55-280~350	SAE J-2236
Environmental testing	Qualified				Rohs2.0/REACH
Color	Black/White				Visual inspection
Sunface treatment	Glossy finish, Matte finish, Textured (fabric-like) finish				Visual inspection
Base Material	Polyester fabric, Nylon fabric, Fiberglass fabric, PTFE (Teflon®) fabric				Visual inspection
Note: The above indicators are for reference only. Final parameters shall be subject to confirmed by actual samples or agreed standards					

Notes:
1. Provide single-sided or double-sided pressure-sensitive adhesive backing to facilitate bonding of surfaces with different interfaces;
2. Provide single-sided or double-sided lamination to keep the die-cut products in shape;
3. The maximum width is 1200 mm, the minimum thickness is 0.5 mm, and the maximum thickness is 8mm;
4. Can be die-cut into various types of products according to the drawings.

Key features:

1. Electrical Performance

Exhibits minimal degradation of electrical properties when exposed to moisture or elevated temperatures. Even during short-circuit events, carbonization products (including carbon dioxide) maintain insulating properties, ensuring continuous operation of electrical equipment. This qualifies the material for wire, cable, and lead wire applications.

2. Exceptional Physiological Stability

Withstands repeated sterilization cycles under harsh conditions. Demonstrates high resilience with low permanent compression set (≤50% after 48h at 200°C per ASTM D395). Dielectric strength ranges from 20-25 kV/mm.

3. Superior Solvent Resistance

Maintains stable performance with:

• Aliphatic, aromatic, and chlorinated hydrocarbon solvents
• Petroleum-based fuels and hydraulic fluids
• Synthetic oils (including ester-based lubricants and silicate ester hydraulic fluids)

at ambient temperatures.

Main Applications:

It can work in environments with low and high temperatures and in oil media. It can also be used as a shock-absorbing and energy-absorbing material for new energy battery packs.