



# **KB101FS—Ultra Soft Silicone Foam**

KB101FS is ultra soft silicone foam material made of addition molded polydimethylsiloxane, with small and uniform pore size. It is an environmentally friendly polymer material. Compared with foam products made of traditional materials, this material has the characteristics of non-toxic and environmentally friendly, anti compression deformation, excellent creep resistance, good insulation and flame retardant properties. In addition, this material can withstand extreme temperatures, ultraviolet radiation, and ozone, and has excellent mechanical fatigue resistance, making it an ideal material for various high-performance shock absorption, sealing, cushioning, sound insulation, protection, insulation, and flame retardancy.

### Key features:

- 1. Low compression set and high creep resistance;
- 2. Excellent flame retardancy, low smoke density toxicity, high oxygen index;
- 3. High electrical insulation.
- 4. Wide operation temperature range, capable of continuous operation from -60 °C to 200 °C;
  - 5. Environmentally friendly with zero VOC.



## Applition:

- 1. Used for various damping and cushioning in assembly lines of aerospace, high-speed rail, automobiles, energy storage, etc;
- 2. Used for various types of sealing, applied to assembly lines such as new energy PACK and electrical cabinets:
- 3. Used for various insulation, flame retardancy, low VOC, sound insulation, insulation, protection, etc.









#### **Customized products:**

- 1. The maximum width dimension is 1200 mm, the minimum thickness is 0.5 mm, the maximum thickness is 30 mm, and the standard width is 1000mm or 500mm;
- 2. Provide single-sided or double-sided pressure-sensitive adhesive backing for easy bonding of surfaces with different interfaces;
  - 3. Provide single-sided or double-sided film coating to maintain the shape of die cut products;
  - 4. Dimensional tolerances for foam silicone: comply with the allowable dimensional tolerances in

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GB/T18944.1-2003 for polymer porous elastic materials, sponges, and porous rubber products.

Properties	Test method	Hard series typical value		
Troporties	Test metrou	KB101FS		
Color	Visualization	black/grey/red/white		
Standard width (mm)	GB/T17794-2021	500/1000		
Density (g/cm <sup>3)</sup>	ASTM D 1056	0.16±0.03		
Tensile strength (kpa≥)	ASTM D 412	≥80		
Elongation at break (%≥)	ASTM D 412	≥80		
Compression set stress (Kpa)	ASTM D 1056 compress 25%	15±10		
Permanent compression deformation (100°C@50%)	ASTM D 1056	≤5.0		
Low temperature bending (-55°C)	ASTM D1056-14	pass		
Water absorption rate (%≤)	ASTM D 1056	≤5.0		
Flame retardancy / smoke toxicity				
Flame retardancy UL-V0/EN45545-2	UL94/EN45545-2	pass		
Flame spread index (Ls)	<b>ASTM E 162</b>	<35		
Smoke density (Ds)	ASTM E 662-2015	<50		
Toxicity Emission Rating	SMP-800-C	pass		
Electrical and thermal performance				
Dielectric strength (KV/mm)	ASTM D 149	≥3.0		
Volume resistivity (Ω·cm)	ASTM D 257	≥1.0*10 <sup>14</sup>		
Usage temperature (°C)	SAEJ-2236	-60~200		
Thermal conductivity [W/(m.K)]	ASTM C 518	0.05		
Environment protection				
Environmental testing REACH/ROHS2.0	pass			

## KB101FS—Technical Data Sheet of Silicone Foam:

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70	Thickness (mm)	Tolerance (mm)	Standard Cutting	Width (mm)	Tolerance (mm)
Standard thickness	$1 \le T \le 3$	± 0.3		W ≤ 300	± 3
	$3 < T \le 5$	± 0.4		450 ≤ W ≤650	± 5
tolerance	5 < T ≤ 9	± 0.6	width tolerance	650< W ≤920	± 7
	$10 < T \le 15$	± 1.0	<i>f</i>	W≥1000	±10
	15 < T ≤ 20	±1.5			

#### Remarks:

- 1. KB-101F-3GFA 'KB 'Represents Kompa '1'Represents Kompa product serial number '01'Represents the density of the foam 'F' Stands for foam abbreviation (Foam) '3' Represents the thickness of the foam 'G' Represents the color grey of the foam 'F'Short for protective film 'A'Short for Adhesive
- 2. The typical value is the average value of the overall performance data, if you need to know the technical specification value, please contact Jiangsu Kompa New Material Co., LTD.

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