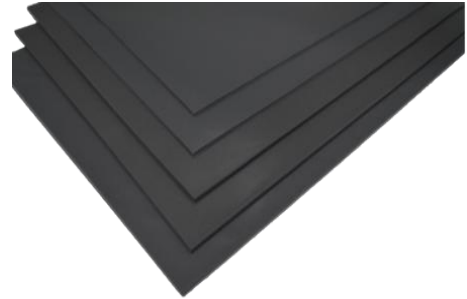


FUTUREWAY® FL-135

Flame-retardant soft silicone rubber

FUTUREWAY® FL-135 flame-retardant soft silicone rubber is a high-performance silicone rubber suitable for special working conditions such as cushioning, filling, supporting and other applications. It has low rebound force, high shear strength, excellent environmental aging resistance, excellent compression performance, high elasticity retention ability and outstanding flame-retardant properties. This product is an excellent material choice for various industrial applications.



Features & Benefits

- Long-term mechanical performance retention ability after compression, especially in extreme cold and hot environments
- Ultra-low mechanical attenuation characteristics after repeated compression
- UV resistance, ozone resistance, and extreme temperature resistance make materials more stable in complex environments
- Meets UL 94 V-0 rated for flame resistance

Typical Applications

- Prismatic cell cushioning pads
- Sealing, shock absorption, filling gaps, supporting, etc.

Services

- Available with a pressure sensitive-adhesive on one or two sides
- Available with slitting and splicing services

Use

For PSA options, surfaces must be clean and free of oil, grease, moisture, dust and dirt. Isopropyl alcohol is good for cleaning the surface.

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Typical Properties

Properties	Unit	Method	Typical value
Physical			
Color	-	-	Black, Gray
Thickness	mm	-	0.65~8
Density	g/cm ³	ASTM D1056	0.83
Hardness	Shore A	ASTM D2240	35
Compression Force Deflection	kPa	GB/T 7757	10% 210
			20% 350
			30% 510
Tensile Strength	MPa	ASTM D412	1.1
Elongation	%	ASTM D412	110
Shear Modulus	MPa	ASTM C273C /273M	0.96
Shear Strength	MPa		1.01
Compression Set	%	ASTM D1056, 100°C/22h/50%	22
Flammability			
Flame Resistance	-	UL 94	V-0 (≥ 1 mm T)
Electrical&Thermal			
Thermal Conductivity	W/(m·K)	ASTM C518	0.172
Insulation resistance	MΩ	ASTM D257	7×10 ⁶
Leakage Current	mA	IEC 60243-2	0.02
Temperature Range	°C	SAE J2236	-55~+200

Notes:

*Typical value is based on historical data. Please note the frequency of testing varies.

**Additional industry specifications are also available. All other properties are based on industry standard guidelines.

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Standard Thickness Tolerances

Nominal Thickness (mm)	Tolerance (mm)
0.65, 1.0, 1.3	± 0.15
1.5, 2.0	± 0.2
2.5, 3.0	± 0.3
3.5, 4.0	± 0.4
4.5, 5.0, 5.5	± 0.5
6.0, 7.0, 7.5, 8.0	± 0.6

Slit Material and Tape (PSA) Width Tolerances

Nominal Width (mm)	Tolerance (mm)
$0 < W \leq 76$	± 1.60
$76 < W \leq 203$	± 2.39
$203 < W \leq 305$	± 3.18
$305 < W \leq 457$	± 4.78
$457 < W \leq 660$	± 5.56
$660 < W \leq 914$	$+ 25.4, - 0$

Usable Life & Storage 10 years after the date of manufacture when stored in original packaging at temperatures up to 35°C and 70% relative humidity (see applicable data sheets for pressure-sensitive adhesive option).

Packaging Information Master roll size: 500 mm or 914mm width. Length varies with thickness. Special thickness and roll sizes also available.

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