

FUTUREWAY® SRL-1140F

Medium Firm Silicone Foam

FUTUREWAY® SRL-1140F is a medium firm silicone foam. It has the characteristics of high elasticity, compression resistance, creep resistance, flame resistance and fireproof. It is suitable for sealing, shock absorption, cushioning, thermal insulation and other applications, and meets electric vehicles, energy storage, photovoltaic, industry, consumer electronics and other industry requirements. In addition, FUTUREWAY® SRL-1140F has excellent environmental aging resistance and chemical mediator resistance and sufficient reliability.



Features & Benefits

- Long-term compression and repeated compression with excellent elastic retention ability reduce the replacement costs of cushion and shock absorption gasket
- UV resistance, ozone resistance, extreme temperature resistance and flame resistance make materials stable in complex environments
- Apply to GB 38031-2020 Electric vehicles traction battery safety requirements
- Meet UL 94 industrial fire prevention requirement

Typical Applications

- Environmental sealing(UL 50E file: MH65528), dustproof, waterproof, moisture proof or shading, such as electronic products shell, lamp contour, electronic components around, etc.
- Vibration isolation, cushioning, filling, such as electric vehicle interiors, battery pack interior, energy storage, etc.
- As flame resistance, insulating material and so on

Services

- Available with a pressure sensitive-adhesive on one or two sides
- Provide cutting, splicing and other processing 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.

Statement: The information contained in this data sheet is intended to assist you in the design of Futureway materials. It is not intended to and does not create any explicit or implicit guaranties, including any guaranty of marketability of the goods and for special purposes. It is also not guaranteed that users can achieve the results shown in the technical specifications of this material in specific applications. They will change with different application situations, such as equipment type, environmental conditions, process conditions, etc. Users should determine the suitability of Futureway materials for each application.

Typical Properties

Property	Unit	Test Method	Typical Value
Physical			
Color	-	-	Gray, Black
Thickness	mm	-	0.79-12.70
Density	kg/m ³	ASTM D1056	350
Tensile Strength	kPa	ASTM D412	450
Elongation	%	ASTM D412	90
Compression Force Deflection	kPa	ASTM D1056	70
Compression Set	%	ASTM D1056 100°C/22hrs/50%	0.1
Water Absorption	%	Internal	0.7
Flammability			
Flame Resistance	-	UL 94 (File E519126)	Black: V-0 ; Gray: V-0 (T ≥ 4.78 mm)
Electrical & Thermal			
Dielectric Strength	kV/mm	ASTM D149	5.7
Thermal Conductivity	W/(m·K)	ASTM C518	0.08
Temperature Range	°C	SAE J2236	-55 to +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.

***For specific product specifications, please contact Futureway.

Standard Thickness Tolerances

Nominal Thickness(mm)	Tolerance(mm)
0.79	+ 0.3/- 0.1
1.0, 1.5, 1.59, 2.0, 2.39 3.0, 3.18, 3.5, 4.78, 5.0	± 0.3
6.0, 6.35, 7.0	± 0.5
8.0, 9.53, 10.0	± 0.7
12.70	± 0.9

Slit Material and Tape (PSA) Width Tolerances

Nominal Width(mm)	Tolerance(mm)
$W \leq 20$	± 1.0
$20 < W \leq 40$	± 1.5
$40 < W \leq 100$	± 2.0
$100 < W \leq 450$	± 5.0

Statement: The information contained in this data sheet is intended to assist you in the design of Futureway materials. It is not intended to and does not create any explicit or implicit guaranties, including any guaranty of marketability of the goods and for special purposes. It is also not guaranteed that users can achieve the results shown in the technical specifications of this material in specific applications. They will change with different application situations, such as equipment type, environmental conditions, process conditions, etc. Users should determine the suitability of Futureway materials for each application.

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.

Statement: The information contained in this data sheet is intended to assist you in the design of Futureway materials. It is not intended to and does not create any explicit or implicit guaranties, including any guaranty of marketability of the goods and for special purposes. It is also not guaranteed that users can achieve the results shown in the technical specifications of this material in specific applications. They will change with different application situations, such as equipment type, environmental conditions, process conditions, etc. Users should determine the suitability of Futureway materials for each application.