

FUTUREWAY® CC-40

Soft Silicone Foam For Pouch Cells

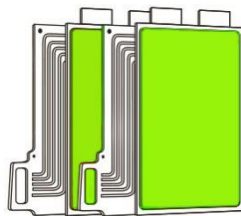
FUTUREWAY® CC-40 is a new silicone foam developed by Futureway in combination with the technical requirements of pouch cells foam. Excellent anti-aging ability, wide compressible range, high elastic retention ability of multiple compression, excellent flame retardant properties are incomparable with other foam. This product design fully combines the new energy industry specifications and application requirements, providing longer charging and discharging life and higher security for battery packs.



Features & Benefits

- Long-term mechanical properties retention after compression, especially in cold and hot environment
- The mechanical properties attenuation is very low after repeated compression, which fully guarantee the safety of charging and discharging of the pouch cells
- Anti-ultraviolet radiation, ozone resistance, extreme temperature resistance and flame resistance make materials stable in complex environments
- Meet UL 94 industrial fire prevention requirement, provide adequate protection for battery pack safety
- Apply to GB 38031-2020 Electric vehicles traction battery safety requirements

Typical Applications



Pouch cell cushion

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	-	-	Black
Thickness	mm	-	1.5-4.0
Density	kg/m ³	ASTM D1056	300
Tensile Strength	kPa	ASTM D412	220
Elongation	%	ASTM D412	68
Compression Force Deflection	kPa	Size:50mm(L)*50mm(W)	10%
		*2mm(T)	27
		Speed:2mm/min	40%
Compression Set	%	ASTM D1056, 100°C/22hrs/50%	103
Flammability			
Flame Resistance	-	UL94	V-0
Electrical & Thermal			
Dielectric Strength	kV/mm	ASTM D149	3.5
Thermal Conductivity	W/(m·K)	ASTM C518	0.05
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.

Standard Thickness Tolerances

Nominal Thickness (mm)	Tolerance (mm)
1.5, 2.0, 2.5, 3.0	± 0.3
3.5, 4.0	± 0.4

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

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- 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: 914 mm width. Length varies with thickness. Special thickness and roll sizes also available.

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