

Technical Data Sheet: ZSF-40F

Medium Hardness Silicone Foam



ZSF-40F is a medium hardness silicone foam that has the characteristics of elasticity, compression resistance, creep resistance, flame resistance and fireproof. It meets the requirements of rail transit, aerospace and other industries requirements. In addition, it has excellent environmental aging resistance, chemical resistance and sufficient reliability.



Characteristics

- Long-term compression and repeated compression with excellent elastic retention ability reduce the replacement costs of cushion and shock absorption gasket
- Anti-ultraviolet radiation, ozone resistance, extreme temperature resistance and flame resistance make materials stable in complex environments

Applications

- Suitable to be used as environmental sealing, dustproof, waterproof, moisture proof or shading, such as battery pack seal, electrical control cabinet
- Vibration isolation, cushioning, filling, such as electric vehicle interiors, battery pack interior, train interior, etc.
- As flame retardant, insulating material and so on

Properties

Properties	ZSF-40F			Standard
Colour	Dark Grey			-
Standard Thickness (mm)	$0.8 \leq T \leq 3$	$3 < T \leq 7$	$7 < T \leq 13$	-
Density (kg/m ³)	400 ± 40	350 ± 40	330 ± 40	ASTM D1056
Tensile Strength (kPa)	≥ 300	≥ 300	≥ 250	ASTM D412
Elongation at Break (%)	≥ 80	≥ 80	≥ 50	ASTM D412
Compression Force at 25% Deflection (kPa)	65 - 100	55 - 90	45 - 85	ASTM D1056
Water Absorption Rate (Vacuum degree 85kPa) (%)	< 10	< 5	< 5	ASTM D1056
Compression Set, Test D at 100°C (%)	< 5			ASTM D1056
Flame Resistance	V-0			UL-94
Dielectric Strength (kV/mm)	6.8			ASTM D149
Thermal Conductivity (W/(m.K))	0.07			ASTM C518

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Properties	ZSF-40F	Standard
Recommended Temperature (°C)	-55 ~ 200	SAE J-2236
Recommended Max Temperature for Intermittent Use (°C)	250	-