

SOFT-SHIELD® 4860

High Temperature Electrically Conductive Foam EMI Shielding Gaskets

Parker Chomerics SOFT-SHIELD® 4860 is a true multi-planar, Z-axis electrically conductive foam for indoor applications. It is based on the unique integration of electrically conductive silver-plated nylon fibers into a low-density silicone foam, providing for a performance-driven, cost-effective EMI shielding solution. It is the higher temperature, halogen free version of the market leading SOFT-SHIELD® 4850, with an operating temperature up to 125°C.

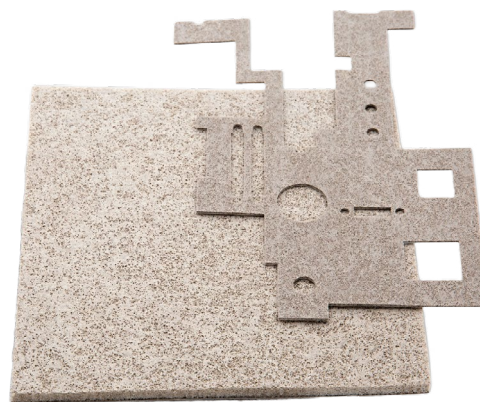
The optimized dispersion of conductive fibers within the silicone foam matrix means that this material is electrically stable over many closure cycles while experiencing a lower compression set of <5%. Provided with or without an electrically conductive (Silver-Plated Copper filled) acrylic pressure sensitive adhesive, SOFT-SHIELD® 4860 is available in bulk rolls, cut sheets, strip gaskets or custom die cut shapes.

Product Features

- Maximum operating Temperature up to 125°C
- 95 dB typical shielding effectiveness from 20 MHz to 10 GHz
- Z-axis electrical conductivity
- Excellent through resistance (<40 milliohms at 30% gasket deflection)
- Low closure force
- Stable electrical performance (through resistance) after multiple closure cycles
- Low compression set <5%
- Available in bulk rolls, cut sheets or custom die cut shapes
- Halogen Free
- Non-nickel bearing material
- RoHS & REACH compliant
- UL 94 V-0 (Tested by Chomerics)

Typical Applications

- I/O panels, backplanes, connectors, access panels and rectangular/square strip gasket seals
- Telecom Infrastructure rack and enclosure components
- Servers and desktop PCs
- LCD/PDP large screen TVs
- Indoor electronics applications requiring UL94 V-0 rating



SOFT-SHIELD® 4860 PRODUCT INFORMATION

Typical Properties	SOFT-SHIELD 4860	Test Method
Shielding Effectiveness – 20 MHz to 10 GHz, dB	95	CHO-TM-TP08
Compression-Deflection – 3 mm thick sample, psi (kPa)	25% - 2.8 (19.3) 50% - 5.3 (36.5)	ASTM C165 (Modified)
Through-Resistance – 3 mm thick sample	(See Figure 1)	ASTM D991
Gasket Compression Set, %	<5	ASTM D3574
Tensile Strength – 3 mm thick sample, psi (MPa)	45 (0.3)	ASTM D412 (Modified)
Electrically Conductive Acrylic PSA Peel Strength, oz/in	15	ASTM D1000 (Modified to 90° peel)
Recommended % Deflection Range, %	15 - 50	--
Flammability	V-0	UL 94
Operating Temperature °F (°C)	-40 to 257 (-40 to 125)	--
Recommended Storage Conditions @ 50% Relative Humidity °F (°C)	70 ± 20 (21 ± 10)	--
Shelf Life with PSA, months from date of shipment	24*	--
Shelf Life (no adhesive)	Indefinite	--

* Possible extension of additional twelve (12) months. [See Parker Chomerics Shelf Life Re-certification for Laminated Solutions document for procedure.](#)

Dimensional Tolerances

Minimum Wall Width for Steel-Rule Die cut parts, inches (mm), 0.100 (2.54)

Overall Die-Cut inches (mm)

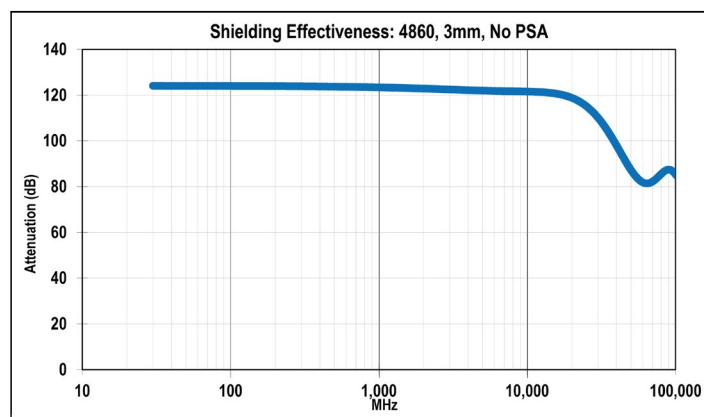
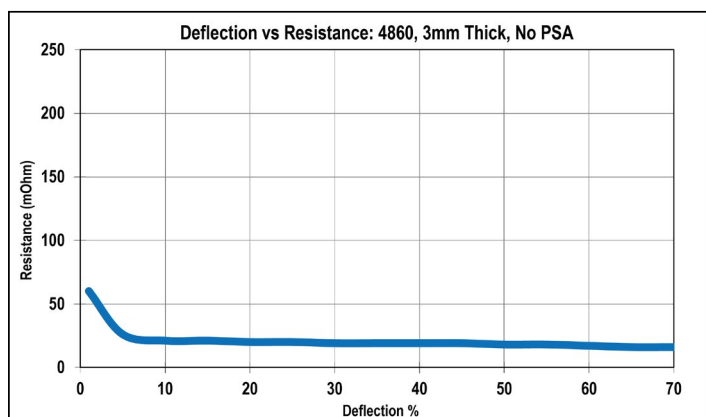
Up to 10.00 (up to 254) ±0.020 (0.51)

10.01 to 20.00 (254.3 to 508) ±0.030 (0.76)

20.01 to 30.00 (508.3 to 762) ±0.040 (1.02)

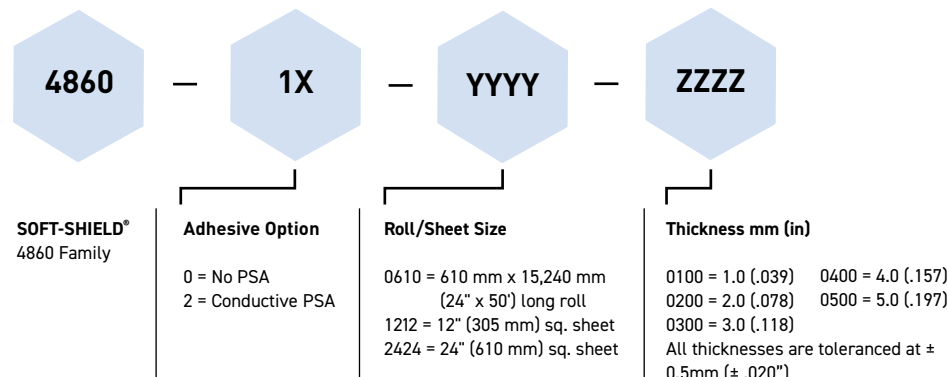
Over 30.00 (over 762) ±0.060 (1.52)

All thicknesses are toleranced at ± 0.5mm (± .020")



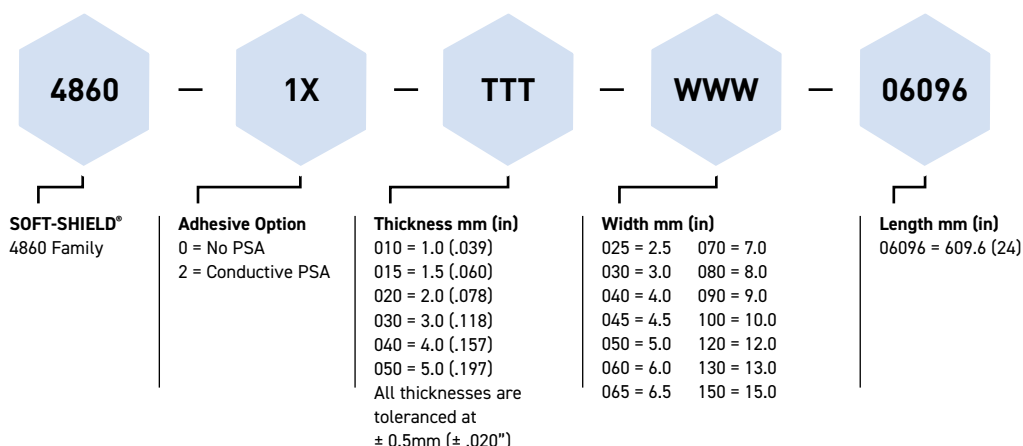
SOFT-SHIELD® 4860 ORDERING INFORMATION

Part Numbering – 50 ft long bulk rolls and sheets

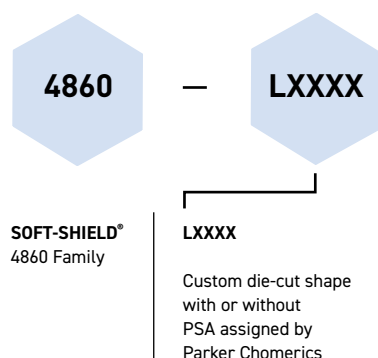


For custom die-cut parts, contact Parker Chomerics Inside Sales.

Part Numbering – Strip Gaskets



Custom Part Numbering



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