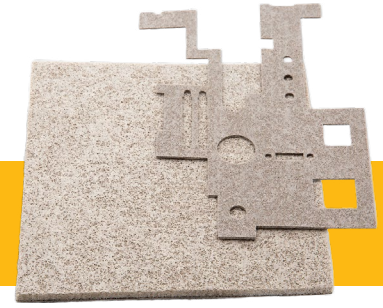


SOFT-SHIELD® 4850

Electrically Conductive Foam EMI Shielding Gaskets



Parker Chomerics SOFT-SHIELD® 4850 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 urethane foam, providing for a performance-driven, cost-effective EMI shielding solution.

Through the optimization of conductive fiber construction, loading and dispersion within the foam matrix, SOFT-SHIELD 4850 provides excellent Z-axis electrical conductivity with extremely short ground paths.

SOFT-SHIELD 4850 has a UL 94 V-0 flammability rating and is available in configurations such as bulk rolls, cut sheets or custom die cut shapes. A uniform silver-plated copper particle filled, electrically conductive acrylic pressure sensitive adhesive (PSA) is available on one side for ease of assembly.



Contact Information

Parker Hannifin Corporation
Chomerics Division
77 Dragon Court
Woburn, MA 01801

Phone: 781 935 4850
Fax: 781 933 4318
chomailbox@parker.com

parker.com/chomerics

Product Features

- 95 dB typical shielding effectiveness from 20 MHz to 10 GHz
- Z-axis electrical conductivity
- Excellent through resistance (<60 milliohms at 30% gasket deflection with pressure-sensitive adhesive)
- Low closure force
- Stable electrical performance (through resistance) after multiple closure cycles
- Low compression set <15%
- Available in bulk rolls, cut sheets or custom die cut shapes
- Non-nickel bearing material

Typical Applications

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

SOFT-SHIELD® 4850 Product Information

Typical Properties	SOFT-SHIELD® 4850	Test Method
Shielding Effectiveness – 20 MHz to 10 GHz, dB	95	CHO-TM-TP08
Compression-Deflection – 3 mm thick sample, psi (kPa)	25% - 2.5 (17.2) 50% - 4.3 (29.6)	ASTM C165 (Modified)
Through-Resistance	(See Figure 1)	ASTM D991
Gasket Compression Set, %	<15	ASTM D3574
Tensile Strength – 3 mm thick sample, psi (MPa)	306 (2.1)	ASTM D412 (Modified)
Electrically Conductive Acrylic PSA Peel Strength, oz/in	15	ASTM D1000 (Modified to 90° peel)
Recommended % Deflection Range, %	15 - 50	--
Flammability (See UL File Number E140244)	V-0	UL 94
NASA Outgassing, % TML (% CVCVM)	7.20 (4.35)	ASTM E595
Operating Temperature °F (°C)	-40 to 158 (-40 to 70)	--
Recommended Storage Conditions @ 50% Relative Humidity °F (°C)	21 ± 10 (70 ± 20)	--
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")

Figure 1

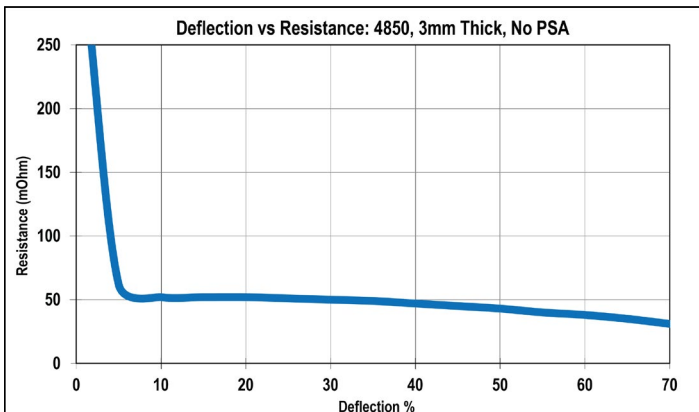
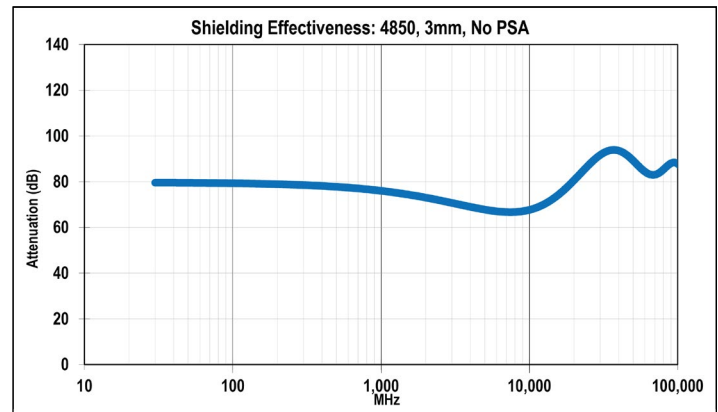
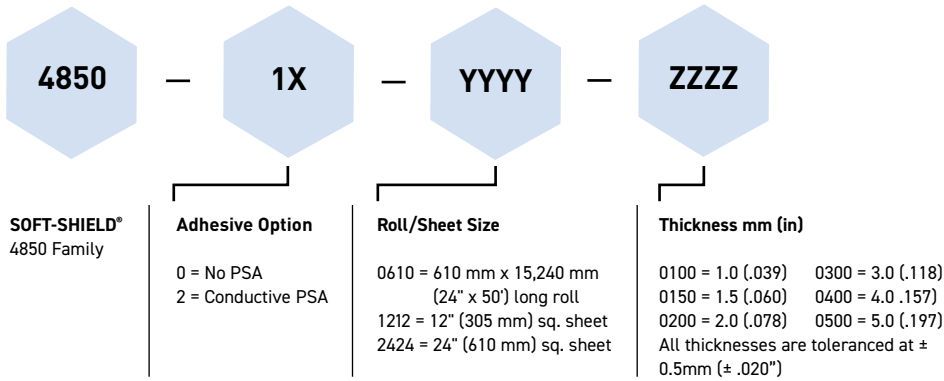


Figure 2



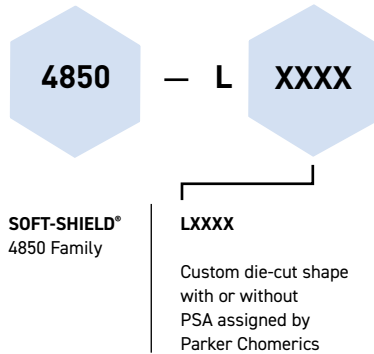
SOFT-SHIELD® 4850 Ordering Information

Table 2 - Part Numbering – 50 ft long bulk rolls and sheets

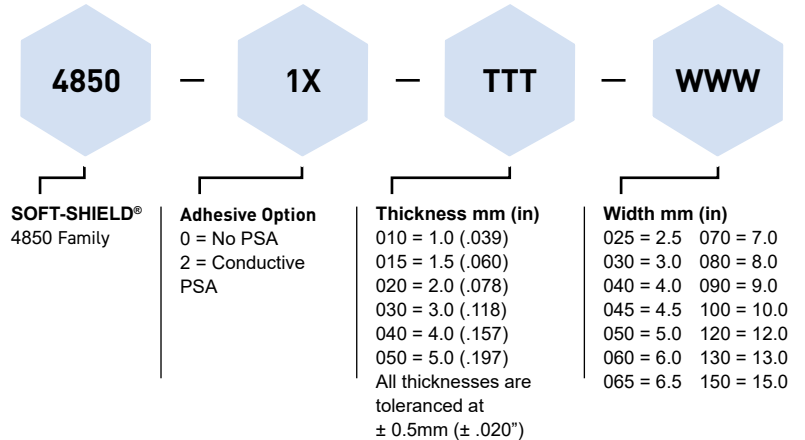


For custom die-cut parts, contact Parker Chomerics Inside Sales.

Table 3 - Custom Part Numbering



Part Numbering – Strip Gaskets



Talk to an Expert about Your Project



Get a Quote

Where to Buy

Request a Free Sample Here

Parker Chomerics

PARKER.COM/CHOMERICS