

# SOFT-SHIELD® 4800

## Multi-planar EMI Gaskets



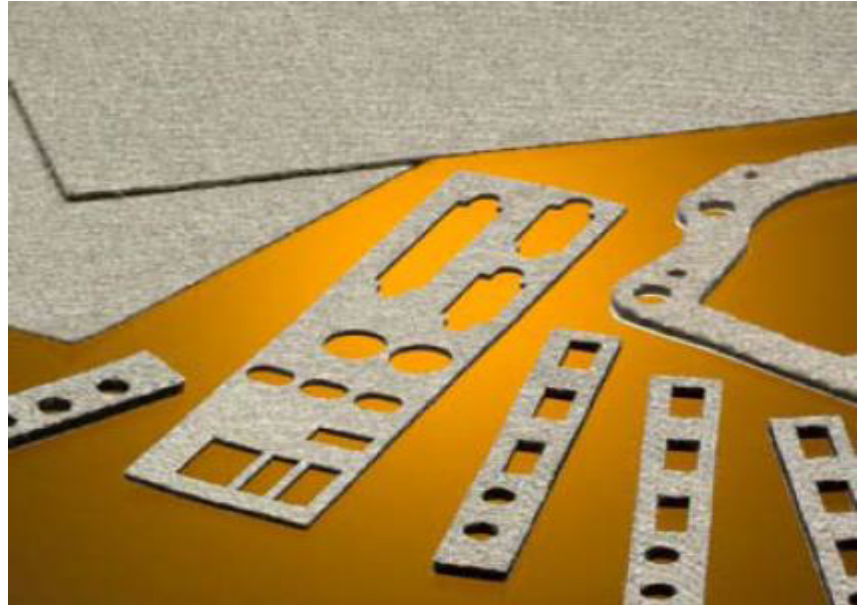
### Customer Value Proposition:

SOFT-SHIELD® 4800 Multi-planar conductive Z axis foam EMI gaskets represent Parker Chomerics newest innovation in soft foam based EMI shielding technology. The unique integration of electrically conductive silver-plated fibers into low density open cell urethane foam provides the basis for a performance driven, cost effective EMI shielding solution.

Through the optimization of the conductive fiber construction, loading and dispersion within the foam matrix, Soft-Shield 4800 provides superb Z-axis conductivity with extremely short ground paths.

Since the integrity of the base foam is uncompromised, Soft-Shield 4800 offers exceptional physical and mechanical properties as well as stable electrical performance (through resistance) after multiple closure cycles.

Soft-Shield 4800 is manufactured in rolls and is easily converted into product forms applicable for I/O panels, backplanes, connectors, access panels and rectangular/square strip gasket seals.



### Product Features:

- Excellent through resistance (< 10 milliohm @ 50% gasket deflection).
- Option of unique selectively coated PSA (pressure sensitive adhesive) optimizes gasket adhesion and electrical interface resistance. (Fig.1)
- Excellent compression set properties.
- Very low closure force.
- Non-nickel bearing material (silver plated fibers).
- Non-Bromine bearing materials (RoHS compliant).
- Roll form compatible with high speed/ low cost part conversion.
- Compartmental shielding of cut-outs or easy "peel-and-stick" grounding applications.

### Contact Information:

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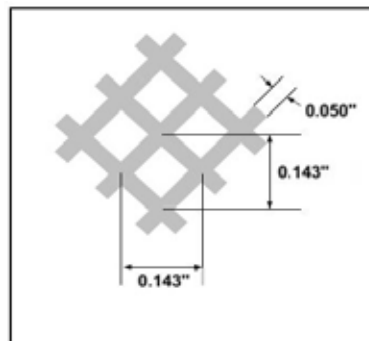


Figure 1 Cross-Hatch PSA

# SOFT-SHIELD® 4800 - Product Information

**Table 1: Typical Properties**

Typical Properties	SOFT-SHIELD 4800	TEST METHOD
Compression-Deflection (lb/linear inch) ex. 3mm	25% - 1.95 lb/inch 50% - 6.30 lb/inch	ASTM C165 (Mod.)
Through-Resistance	(See Figure 2)	-
S.E., 20 MHz to 10 GHz	Average: 95 (dB)	CHO-TM-TP08
Compression Set	<15%	ASTM D3574
Tensile Strength (3mm / in <sup>2</sup> )	9.9 lbs./in <sup>2</sup>	0.1 ohm/sq., max
Adhesive Peel Strength	45 oz./inch	PSTC 1 Mod. / 180°
Flammability	HF-1	UL-94
Operating Temperature Range	-40 to +70° C	-

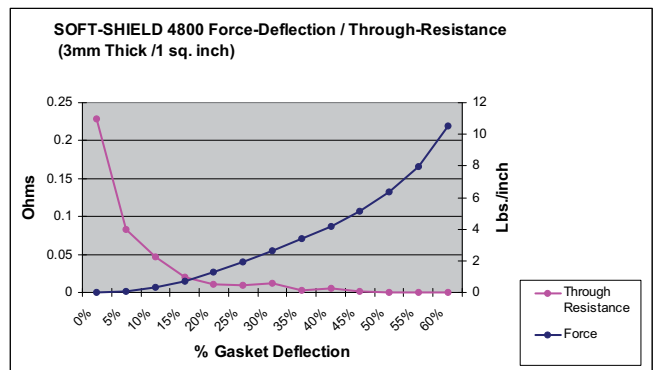
**Table 2: Tolerances**

Dimensional Tolerances inches (mm)	
<b>Minimum Wall Widths</b> 0.100 (2.54)	
<b>Die-Cut inches (mm)</b> up to 20.00 (up to 508) 20.01 to 30.00 (508.3 to 762) over 30.00 (over 762)	<b>inches (mm)</b> ±0.020 (0.51) ±0.030 (0.76) ±0.060 (1.52)
<b>Standard Thicknesses inches (mm)</b> 0.040 (1) 0.060 (1.5) 0.079 (2) 0.118 (3) 0.157 (4) 0.197 (5)	<b>inches (mm)</b> ±0.020 (0.51) ±0.020 (0.51) ±0.020 (0.51) ±0.020 (0.51) ±0.020 (0.51) ±0.020 (0.51)

**Table 3: SS4800 Electrical Stability (Through Resistance)**

PROPERTY	TYPICAL VALUE (ohm/in <sup>2</sup> )		TEST METHOD
<b>Initial Through Resistance</b>	<b>Gasket Dflection</b>		ASTM C-165 Mod.
	25%	50%	
Heat Aging	0.035	0.009	75° C - 168 Hours
High Temp / High Humidity	0.048	0.018	85° C / 95% RH - 48 Hours
Temperature Cycling	0.017	0.010	85° C / 95% RH - 48 Hours
Temperature Cycling	0.038	0.028	-40° C / +65° C - 96 Hours 30 min. dwell at temp. 10 min. ramp time
Compression Cycling	0.069	0.024	1000 Compression Cycles (0-50% gasket deflection)

**Figure 2 Through-Resistance**



## ORDERING INFORMATION:

4800 — 1X — 0610 — ZZZZ

SOFT-SHIELD® 4800 Family      Material      Width mm (inches)      Thickness mm (inches)  
 (ex. 0150 = 1.5 mm)

**0** = No PSA      **610** (24)      **0100** 1.0 (.039)      **0300** 3.0 (.118)  
**1** = Cross-Hatch PSA           **0150** 1.5 (.060)      **0400** 4.0 (.157)  
    **0200** 2.0 (.078)      **0500** 5.0 (.197)

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

[www.chomerics.com](http://www.chomerics.com)  
[www.parker.com/chomerics](http://www.parker.com/chomerics)

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