

Multi-planar EMI Gasket

DESCRIPTION

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



Cross Section showing Multi-planar fiber distribution (10X)

Through the optimization of 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.

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



FEATURES / BENEFITS

- Very low closure force
- Stable electrical performance (through resistance) after multiple closure cycles
- 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
- 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

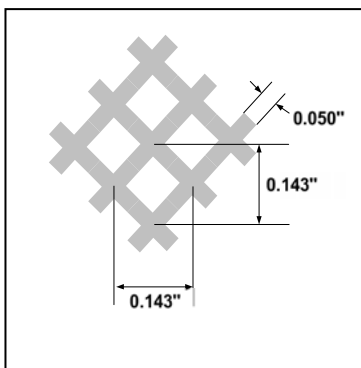
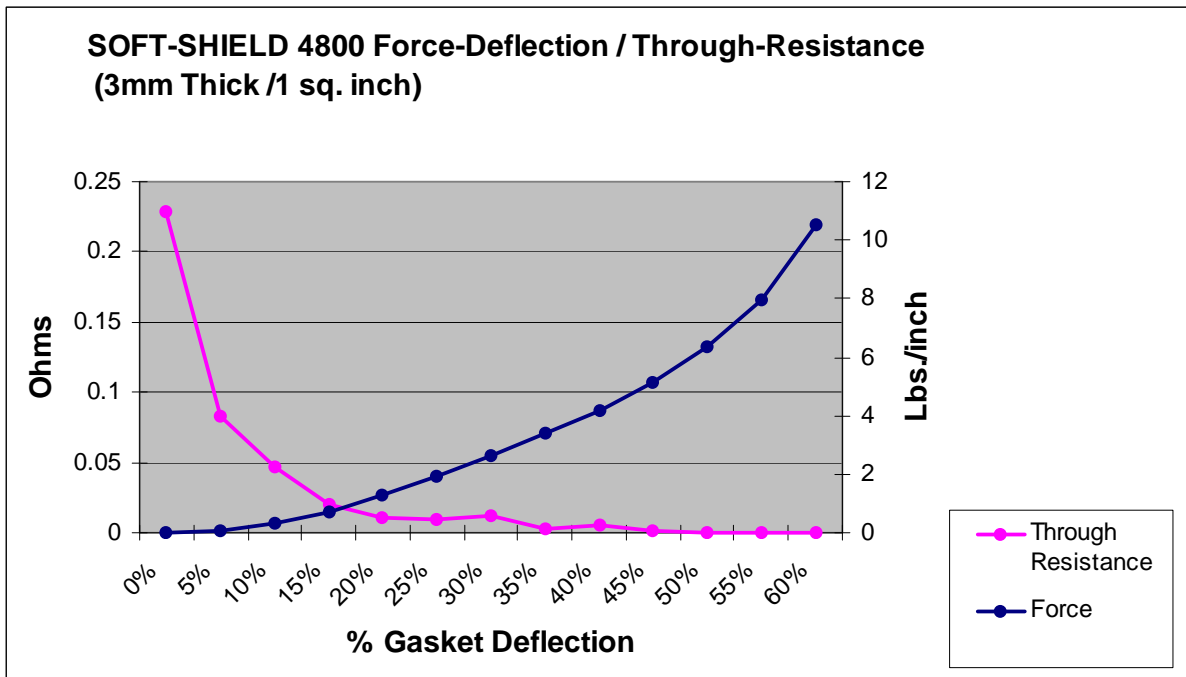


Figure 1
Cross-Hatch PSA

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., 20MHz to 10 GHz	Average: 95 (dB)	CHO-TM-TP08
Compression Set	<15%	ASTM D3574
Tensile Strength (3mm / in ²)	9.9 lbs./in ²	--
PSA Peel Strength	45 Oz./Inch	PSTC 1 Mod. / 180°
Flammability	HF-1	UL-94
Operating Temperature	-40° to 70° C	-

SS4800 ELECTRICAL STABILITY (THROUGH RESISTANCE)

Property	Typical Value (Ohm/in ²)		Test Method
Initial Through Resistance	Gasket Deflection <u>25%</u> <u>50%</u> 0.035 0.009		ASTM C-165 Mod.
Final Through Resistance			--
Heat Aging	0.048	0.018	75°C – 168 Hours
High Temp / High Humidity	0.017	0.010	85°C / 95% RH – 48 Hours
Temp. Cycling	0.038	0.028	- 40°C/+65°C – 96 Hours 30 min. dwell at temp. 10 min. ramp time
Comp. Cycling	0.069	0.024	1000 Compression Cycles (0-50% gasket deflection)



THICKNESS STANDARDS:

- 1mm (0.039")
- 1.5mm (0.060")
- 2mm (0.078")
- 3mm (0.118")
- 4mm (0.157")
- 5mm (0.197")

ORDERING INFORMATION:

4800-XX-YYYY-ZZZZ

XX- 10 no PSA or 11 with PSA
 YYYY- Width (maximum 1422mm)
 ZZZZ- Thickness (ex. 0150 = 1.5mm)

For custom die-cut parts, contact Inside Sales

April 6th 2009