SOFT-SHIELD® 5000

Low Closure Force, Conductive Fabric Jacket over Foam core EMI Gaskets



Customer Value Proposition:

SOFT-SHIELD® 5000 Series gaskets offer a low cost and high performance EMI gasketing solution for commercial electronic systems. The high reliability conductive fabric over foam core construction provides a cost effective alternative to beryllium copper or stainless steel fingerstock EMI gaskets. Applications for these conductive fabric over urethane foam core gaskets include: commercial electronic enclosures. medical electronics and general industrial applications. The variety of available cross-section profiles allow for very low closure forces, thus offering a minimization of the number of necessary fasteners for easy, user friendly installation, without an effect to shielding effectiveness. Cut-to-length strips of gasket are self terminating thereby enhancing the reliability of the application. The urethane foam core has excellent compressibility making the gasket material especially attractive for thin-walled plastic enclosures. Gaskets are offered standard with a UL 94 V-0 flammability rating.

Contact Information:

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www.chomerics.com www.parker.com/chomerics



Product Features:

- Low closure force required for optimum performance.
- Provides shielding effectiveness over 90 dB from 10 MHz to 10 GHz.
- Silver nickel-plated, woven, ripstop nylon jacket over highly compressible urethane foam core.
- Supplied standard with a pressure sensitive acrylic based adhesive (PSA)
- Self terminating jacket no loose fibers or sharp edges when gasket is cut.
- No degradation of shielding effectiveness after 10,000 deflection cycles.
- Supplied in standard 8 foot lengths in multiple cross section styles including rectangular, square, D-shape, C-fold, astragel, P-shape, triangular, and knife-edge with rigid inserts. Custom profiles are also possible.

- Available as kiss-cut parts on polyester film release liner for "peel and stick applications.
- Available as individual pre-cut pieces .
- Single-piece "picture frame" gaskets can also be fabricated from continuous lengths, incorporating integral pre-cut notches.
- UL 94V-0 rated.
- RoHS & REACH compliant



SOFT-SHIELD® 5000 - Available Profiles

Contact Chomerics for any other special requirements and an updated profile list.

ORDERING INFORMATION

Referring to Tables 1-9 to order SOFT-SHIELD 5000 Series gasketing.

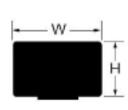
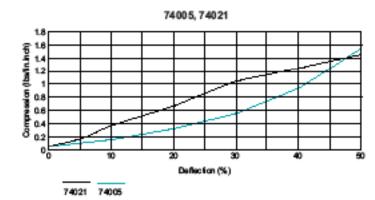
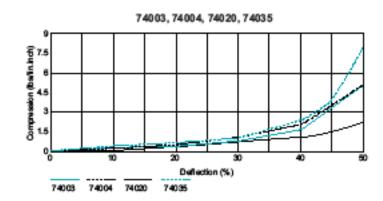
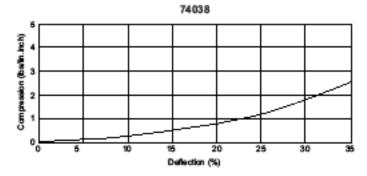


Table 1

RECTANGULAR STRIPS inches (mm)			
Profile Number	Height	Width	
74039	0.020 (0.50)	0.157 (4.00)	
74020	0.039 (1.00)	0.157 (4.00)	
74003	0.039 (1.00)	0.197 (5.00)	
74038	0.039 (1.00)	0.275 (7.00)	
74004	0.039 (1.00)	0.394 (10.00)	
74035	0.059 (1.50)	0.157 (4.00)	
74040	0.062 (1.60)	0.200 (5.00)	
74034	0.071 (1.80)	0.551 (14.00)	
74002	0.079 (2.00)	0.157 (4.00)	
74005	0.079 (2.00)	0.275 (7.00)	
74066	0.079 (2.00)	0.355 (9.00)	







NOTE: Dimensions shown do not include PSA thickness (0.005 inch typically). All SOFT-SHIELD 5000 Series profiles are supplied in UL 94V-0 rated versions.

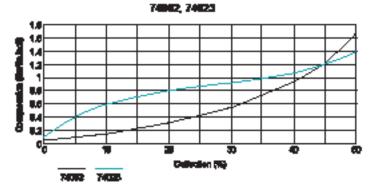
Parker Chomerics

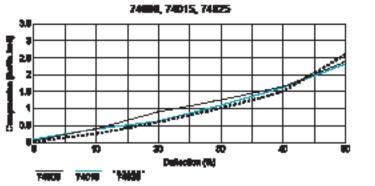
SOFT-SHIELD® 5000 - Available Profiles

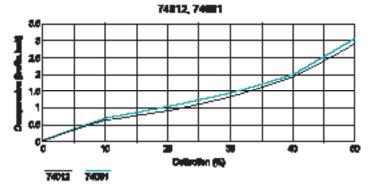


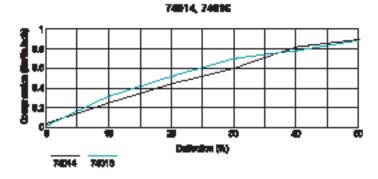
Table 1 continued

RECTANGULAR STRIPS inches (mm)			
Profile Number	Height	Width	
74025	0.079 (2.00)	0.394 (10.00)	
74049	0.079 (2.00)	0.827 (21.00)	
74099	0.090 (2.30)	0.157 (4.00)	
74102	0.098 (2.50)	0.870 (22.00)	
74048	0.118 (3.00)	0.157 (4.00)	
74023	0.125 (3.18)	0.250 (6.35)	
74000	0.125 (3.18)	0.375 (9.53)	
74012	0.125 (3.18)	0.500 (12.70)	
74001	0.125 (3.18)	0.800 (20.32)	
74015	0.130 (3.30)	0.190 (4.83)	
74054	0.200 (5.00)	0.300 (7.60)	
74016	0.250 (6.35)	0.375 (9.53)	
74014	0.250 (6.35)	0.500 (12.70)	
74021	0.375 (9.53)	0.500 (12.70)	









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SOFT-SHIELD® 5000 - Available Profiles



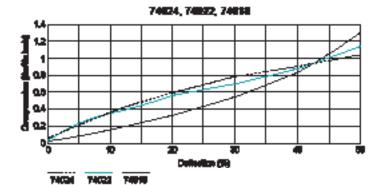
Table 2

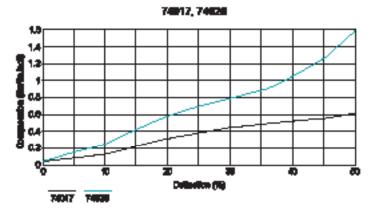
SQUARE STRIPS inches (mm)			
Profile Number	Height	Width	
74018	0.118 (3.00)	0.118 (3.00)	
74017	0.200 (5.00)	0.200 (5.00)	
74022	0.236 (6.00)	0.236 (6.00)	
74118	0.250 (6.35)	0.250 (6.35)	
74024	0.375 (9.53)	0.375 (9.53)	
74028	0.500 (12.70)	0.500 (12.70)	

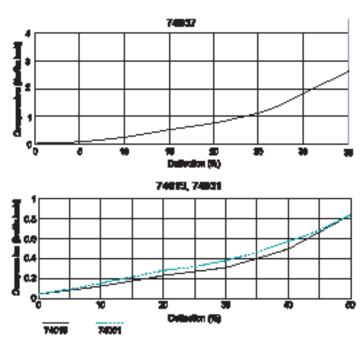


Table 3

D-STRIPS inches (mm)			
Profile Number	Height	Width	
74037	0.060 (1.52)	0.150 (3.80)	
74081	0.070 (1.78)	0.250 (6.35)	
74019	0.090 (2.30)	0.090 (2.30)	
74031	0.090 (2.30)	0.150 (3.80)	
74053	0.100 (2.54)	0.250 (6.35)	
74052	0.108 (2.74)	0.150 (3.80)	
74055	0.110 (2.79)	0.225 (5.72)	
74074	0.110 (2.79)	0.380 (9.65)	
74013	0.120 (3.05)	0.150 (3.80)	







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SOFT-SHIELD® 5000 - Available Profiles

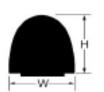


Table 3 continued

D-STRIPS inches (mm)			
Profile Number	Height	Width	
74036	0.120 (3.05)	0.250 (6.35)	
74006	0.140 (3.56)	0.250 (6.35)	
74058	0.140 (3.57)	0.380 (9.65)	
74056	0.155 (3.94)	0.250 (6.35)	
74041	0.157 (4.00)	0.150 (3.80)	
74030	0.157 (4.00)	0.236 (6.00)	
74033	0.180 (4.57)	0.400 (10.16)	
74011	0.250 (6.35)	0.375 (9.53)	
74029	0.375 (9.53)	0.500 (12.70)	



Table 4

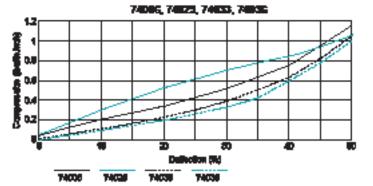
C-FOLD STRIPS inches (mm)			
Profile Number	Height Width		
74057	0.250 (6.35)	0.280 (7.11)	
74008	0.385 (9.78)	0.420 (10.67)	
74027	0.465 (11.81)	0.420 (10.67)	

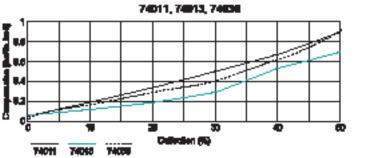


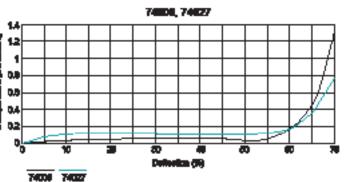
ASTRAGEL STRIPS inches (mm)

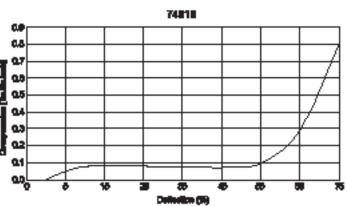
Profile Number | Height | Width

0.675 (17.14) 0.580 (14.73)









NOTE: Dimensions shown do not include PSA thickness (0.005 inch typically). All SOFT-SHIELD 5000 Series profiles are supplied in UL 94V-0 rated versions.





SOFT-SHIELD® 5000 - Available Profiles



Table 6

P-STRIPS inches (mm) inches (mm)			
Profile	Profile Number	Height	Width
P Shape	74009	0.130 (3.30)	0.520 (13.20)

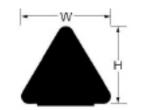


Table 7

TRIANGULAR STRIPS inches (mm)			
Profile Profile Number Height Width			Width
Triangle Shape	74063	0.118 (3.00)	0.150 (3.81)
Triangle Shape	74042	0.782 (19.86)	0.882 (22.40)

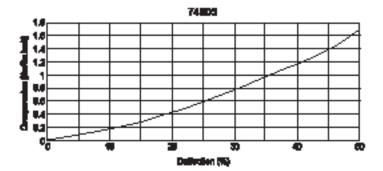


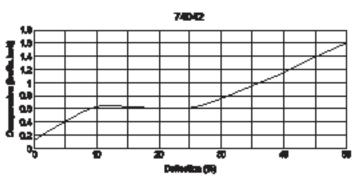
Table 8 Rigid Insert

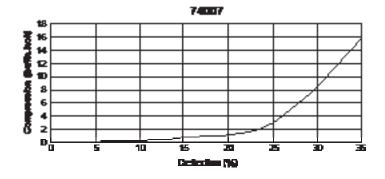
KNIFE-EDGE STRIPS inches (mm)			
Profile	Profile Number	Height	Width
Knife Shape	74007	0.106 (2.69)	0.445 (11.30)

Table 9

OTHER SOFT-SHIELD 5000 PROFILES inches (mm)			
Profile	Profile Number	Height	Width
Stealth Shape	74059	0.080 (2.03)	0.675 (17.15)
Stealth Shape	74101	0.100 (2.54)	0.393 (9.98)
Stealth Shape	74095	0.120 (3.05)	0.400 (10.16)
Stealth Shape	74084	0.134 (3.40)	0.625 (15.88)
Clip Shape	74045	0.200 (5.08)	0.156 (3.96)
Clip Shape	74077	0.240 (6.10)	0.296 (7.52)
Tall D Shape	74032	0.126 (3.20)	0.090 (2.29)









NOTE: Dimensions shown do not include PSA thickness (0.005 inch typically). All SOFT-SHIELD 5000 Series profiles are supplied in UL 94V-0 rated versions.



ENGINEERING YOUR SUCCESS.

SOFT-SHIELD® 5000 - Product Information

Table 10

Typical Properties			
Property	Test Method	SOFT-SHIELD 5000	
Shielding Effectiveness	CHO-TM-TP08	See Figure 1	
Compression-Deflection	ASTM C165 (modified)	See Graphs per Profile	
Compression Set, % @ 25% Deflection	ASTM D3574 (modified)	<15%	
Electrical Conductivity	CEPS-0002	0.1 ohm/sq., max	
Adhesive Peel Strength	ASTM D1000 (90º Bend)	4 lb/inch (0.7 N/mm), min	
Pressure-Sensitive Adhesive	-	Non-Conductive Adhesive	
Operating Temperature Range	-	-40 to +70°C	

Figure 1 Shielding Effectiveness

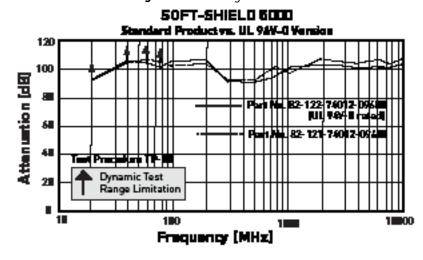
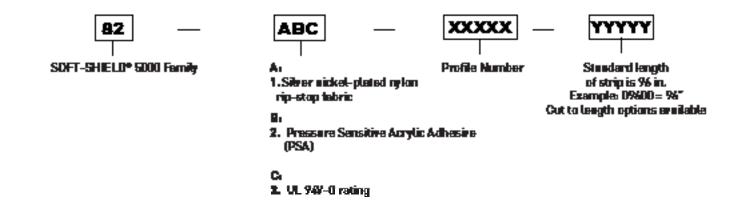


Table 11

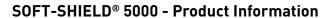
Dimensional Tolerances			
Cross Section inches (mm) Up to 0.040 (1.02) Above 0.040 (1.02) Cut Length inches (cm) up to 5.00 (up to 12.7) 5.01 to 10.00 (12.7 to 25.4) 10.01 to 15.00 (25.4 to 38.1) 15.01 to 20.00 (38.1 to 50.8) 20.01 to 30.00 (50.8 to 76.2) 30.01 to 48.00 (76.2 to 121.92) 48.01 to 95.00 (121.92 to 241.3) over 95.00 (over 241.3)	inches (mm) ±0.010 (0.25) ±0.020 (0.51) inches (mm) ±0.030 (0.76) ±0.060 (1.52) ±0.070 (1.78) ±0.080 (2.03) ±0.100 (2.54) ±0.200 (5.08) ±0.250 (6.35) ±0.500 (12.7)		
Die-Cut inches (mm) up to 10.00 (up to 254) 10.01 to 20.00 (254.3 to 508) 20.01 to 30.00 (508.3 to 762) over 30.00 (over 762)	inches (mm) ±0.020 (0.51) ±0.030 (0.76) ±0.040 (1.02) ±0.060 (1.52)		

ORDERING PROCEDURE

Referring to Tables 1-9, use the part numbering scheme shown here to order SOFT-SHIELD 5000 Series gasketing.







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