

# SOFT-SHIELD® 3500

Plated-Fabric Wrapped Foam  
Economical EMI Shielding Gaskets for Electronics



## Customer Value Proposition:

The SOFT-SHIELD® 3500 fabric over foam (fof) product family are a group of low-closure force EMI/EMC gaskets. SS3500 offers a low cost competitive solution for EMI shielding and electrical grounding in sheer and compression.

The SS3500 product family is comprised of conductive fabric wrapped around open cell foam. This wrap around technology grounds the gasket from point to point, ultimately eliminating an EMI/EMC gap.

SS3500 typically requires less than 1lb/in (0.175/ mm) closure force, making it effective for low closure force applications. SS3500 takes less than 15% compression set. This is less than most other FOF's on the market resulting in reliable/ repeatable shielding performance. SS3500 is an excellent alternative shielding solution to traditional spring finger type products.

The SS3500 product family is one of the most versatile EMI fof products offered to the market. Depending on mechanical and shielding requirements, the SS3500 can be made with different conductive jackets. Nickel-plated taffeta, Nickel-plated rip-stop polyester, halogen free nickel-plated rip-stop, etc. New geometric



profiles are designed and released to the market on a regular basis. Profiles are engineered to optimize mechanical form fit and function while optimizing electrical performance. This technical data sheet will address the most common type FOF. Chomerics has to offer to market. Contact Chomerics for any other special design requirements and an updated profile list.

## Contact Information:

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## Product Features:

- Low cost
- >100(dB) shielding effectiveness 50 MHz to 10 GHz
- Low closure force
- Ultra-soft profiles that accommodate a wide range of tolerance gaps
- Over 200 profiles available to the market
- Readily available in bulk, cut to length or with cut features
- ULV0
- RoHS Compliant
- REACH Compliant

- Excellent low compression set properties
- Abrasion/sheer resistant conductive jackets
- Low contact resistance

## Typical Applications:

- Server Faceplates and blade cards
- Panel seals
- Cover seal
- Door seals
- Grounding tabs
- EMI Window/vent seals
- Improved ground paths
- Low cost solutions are imperative

# Product Information

Table 7 - Typical Properties

Typical Properties	SOFT-SHIELD 3500 Green	Test Method
Shielding Effectiveness, 50 MHz to 10 GHz	> 100 (dB)	CHO-TM-TP08
35% Compression Deflection, lb/in (N/mm), [0.125 x 0.375 in. gasket]	< 1 (<0.175)	ASTM C165
Compression Set	<15%	ASTM D3574
Operating Temperature Range	-40° to 70° C	-
Acrylic Adhesive Peel Strength, 90°b/inch (N/mm) [Min. value]	4 (0.7)	ASTM D1000
Recommended % Deflection	30-50%	--
Flamability	V-0	UL 94

Table 8 - Ordering Information

**Part Number: 77-AB-XXXX-YYYYY**

**Example Part Number: 77-1K-3108-01400**

Description: SOFT-SHIELD 3500 Rip-Stop, Profile 3180 and 14 inches long



SOFT-SHIELD 3500 Family	<p><b>A:</b> 1- UL94V0</p> <p><b>B:</b> 1- No PSA            2- W/PSA and Extended Liner            3- W/PSA Only (No Extended Liner)  <b>L-</b> Halogen Green Taffeta, No PSA  <b>M-</b> Halogen Green Taffeta, PSA Only (No Extended Liner)  <b>N-</b> Halogen Green Taffeta, PSA and Extended Line  <b>P-</b> Halogen Green Rip Stop, NO PSA  <b>Q-</b> Halogen Green Rip Stop, PSA Only (No Extended Liner)  <b>R-</b> Halogen Green Rip Stop, PSA and Extended Liner  <b>H-</b> RipStop fabric NO PSA  <b>J-</b> RipStop fabric, PSA and extended liner  <b>K-</b> RipStop fabric, PSA no extended liner</p>	Profile Number	Standard length of strip is 96 in. Pricing is by the foot
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# Product Information

SOFT-SHIELD® 3500 (Green) - Available Profiles

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

Table 1 - Rectangle Profiles



Rectangle	Width Inch/(mm)		Height inch/(mm)	
3101	0.118	(3.0)	0.079	(2.0)
3102	0.118	(3.0)	0.118	(3.0)
3104	0.157	(4.0)	0.079	(2.0)
3106	0.157	(4.0)	0.118	(3.0)
3107	0.157	(4.0)	0.157	(4.0)
3108	0.189	(4.8)	0.126	(3.2)
3109	0.197	(5.0)	0.079	(2.0)
3110	0.197	(5.0)	0.098	(2.5)
3113	0.197	(5.0)	0.197	(5.0)
3120	0.236	(6.0)	0.079	(2.0)
3126	0.236	(6.0)	0.236	(6.0)
3128	0.252	(6.4)	0.126	(3.2)
3129	0.252	(6.4)	0.157	(4.0)
3130	0.256	(6.5)	0.157	(4.0)
3132	0.264	(6.7)	0.098	(2.5)
3133	0.276	(7.0)	0.079	(2.0)
3136	0.315	(8.0)	0.079	(2.0)
3138	0.315	(8.0)	0.157	(4.0)
3139	0.315	(8.0)	0.197	(5.0)
3148	0.374	(9.5)	0.126	(3.2)
3149	0.374	(9.5)	0.252	(6.4)
3150	0.374	(9.5)	0.374	(9.5)
3151	0.394	(10.0)	0.079	(2.0)
3154	0.394	(10.0)	0.157	(4.0)
3156	0.394	(10.0)	0.197	(5.0)
3159	0.394	(10.0)	0.315	(8.0)

Rectangle	Width Inch/(mm)		Height inch/(mm)	
3161	0.394	(10.0)	0.394	(10.0)
3164	0.472	(12.0)	0.079	(2.0)
3173	0.500	(12.7)	0.126	(3.2)
3174	0.500	(12.7)	0.252	(6.4)
3175	0.500	(12.7)	0.374	(9.5)
3176	0.500	(12.7)	0.500	(12.7)
3187	0.591	(15.0)	0.079	(2.0)
3190	0.591	(15.0)	0.196	(5.0)
3195	0.626	(15.9)	0.126	(3.2)
3298	0.197	(5.0)	0.138	(3.5)
3299	0.252	(6.4)	0.370	(9.4)
3270	0.252	(6.4)	0.252	(6.4)
3300	0.276	(7.0)	0.276	(7.0)
3311	0.295	(7.5)	0.197	(5.0)
3312	0.315	(8.0)	0.118	(3.0)
3313	0.315	(8.0)	0.394	(10.0)
3318	0.354	(9.0)	0.157	(4.0)
3322	0.394	(10.0)	0.217	(5.5)
3323	0.394	(10.0)	0.276	(7.0)
3329	0.394	(10.0)	0.787	(20.0)
3335	0.512	(13.0)	0.098	(2.5)
3336	0.512	(13.0)	0.138	(3.5)
3337	0.512	(13.0)	0.197	(5.0)
3339	0.512	(13.0)	0.276	(7.0)
3342	0.512	(13.0)	0.413	(10.5)
3358	0.787	(20.0)	0.394	(10.0)

Table 2 - Stealth Profiles



Stealth	Width Inch (mm)		Height Inch (mm)	
3823	0.394	(10.0)	0.100	(2.54)
3828	0.320	(8.10)	0.120	(3.00)
3839	0.500	(12.7)	0.140	(3.56)
3840	0.300	(7.60)	0.100	(2.54)
3842	0.675	(17.1)	0.197	(5.00)
3844	0.500	(12.7)	0.080	(2.00)
3845	0.675	(17.1)	0.080	(2.00)
3850	0.625	(16.0)	0.134	(3.40)

Stealth	Width Inch (mm)		Height Inch (mm)	
3856	0.300	(7.62)	0.080	(2.00)
3890	0.400	(10.2)	0.120	(3.05)
3891	0.500	(12.7)	0.157	(4.00)
3894	0.500	(12.7)	0.215	(5.50)
3902	0.564	(14.3)	0.070	(1.80)
3913	0.629	(16.0)	0.350	(12.7)
3922	0.110	(2.80)	0.620	(15.75)
3926	0.255	(6.50)	0.122	(3.10)

# Product Information

## SOFT-SHIELD® 3500 (Green) - Available Profiles

Table 3 - D-Shape Profiles



D-Shape	Width inch/(mm)		Height inch/(mm)	
3601	0.091	(2.3)	0.091	(2.3)
3602	0.091	(2.3)	0.126	(3.2)
3607	0.150	(3.8)	0.059	(1.5)
3608	0.150	(3.8)	0.118	(3.0)
3648	0.150	(3.8)	0.091	(2.3)
3610	0.197	(5.0)	0.078	(2.0)
3611	0.197	(5.0)	0.197	(5.0)
3617	0.256	(6.5)	0.197	(5.0)
3618	0.256	(6.5)	0.236	(6.0)
3649	0.236	(6.0)	0.157	(4.0)
3650	0.252	(6.4)	0.142	(3.6)
3616	0.256	(6.5)	0.134	(3.4)
3622	0.354	(9.0)	0.118	(3.0)
2624	0.374	(9.5)	0.126	(3.2)
3626	0.374	(9.5)	0.252	(6.4)
3628	0.394	(10.0)	0.079	(2.0)
3643	0.500	(12.7)	0.374	(9.5)

Table 4 - Flat Strip Profiles



Flat Strip	Width inch/(mm)		Height inch/(mm)	
3211	0.118	(3.0)	0.039	(1.0)
3214	0.157	(4.0)	0.039	(1.0)
3216	0.197	(5.0)	0.002	(0.5)
3217	0.197	(5.0)	0.039	(1.0)
3219	0.197	(5.0)	0.059	(1.5)
3224	0.276	(7.0)	0.039	(1.0)
3226	0.276	(7.0)	0.059	(1.5)
3230	0.315	(8.0)	0.039	(1.0)
3232	0.394	(10.0)	0.020	(0.5)
3233	0.394	(10.0)	0.039	(1.0)
3234	0.394	(10.0)	0.047	(1.2)
3241	0.512	(13.0)	0.059	(1.5)
3268	0.157	(4.0)	0.020	(0.5)
3370	0.157	(4.0)	0.059	(1.5)
3392	0.512	(13.0)	0.039	(1.0)

Table 5 - C-Fold Profiles



C-Fold	Width inch/(mm)		Height inch/(mm)	
3803	0.315	(8.0)	0.315	(8.0)
3806	0.421	(10.7)	0.386	(9.8)
3830	0.421	(10.7)	0.465	(11.8)
3831	0.421	(10.7)	0.394	(10.0)
3807	0.579	(14.7)	0.673	(17.1)

Table 6 - Knife-edge Profiles



Knife Edge	Width inch/(mm)		Height inch/(mm)	
3810	0.500	(12.7)	0.100	(2.5)
3811	0.752	(19.1)	0.252	(6.4)
3826	0.445	(11.3)	0.100	(2.5)
3808	0.492	(12.5)	0.137	(3.5)

Table 7 - P-Shape Profiles



P-Shape	Width inch/(mm)		Height inch/(mm)	
3816	0.520	(13.2)	0.130	(3.3)

Table 8 - Flat Strip Profiles

I.O. (Wide)	Width inch/(mm)		Height inch/(mm)	
3244	0.709	(18.0)	0.079	(2.0)
3260	1.575	(40.0)	0.079	(2.0)
3261	1.575	(40.0)	0.126	(3.2)
3402	0.984	(25.0)	0.079	(2.0)