

# 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 is a group of low-closure force EMI/EMC gaskets. SS3500 offers a low cost / low closure force competitive solution for EMI shielding and electrical grounding in shear 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, etc.



New 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 addresses the most common type FOF Parker 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
- Low contact resistance
- Over 250 profiles available to the market
- Readily available in bulk, cut to length or with cut-outs / features
- RoHS, REACH and UL 94 V-0 Compliant
- Good low compression set properties
- Abrasion / shear resistant conductive jackets

## Typical Applications:

- Server Faceplates and blade cards
- Electronic enclosures
- Consumer electronics
- Door seals
- EMI Window / vent seals
- Grounding Applications

# Product Information

Table 1 - Typical Properties

Typical Properties	SOFT-SHIELD® 3500	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 Range	20 - 60%	--
Flammability	V-0	UL 94

Table 2 - Ordering Information



SOFT-SHIELD 3500 Family	<b>A:</b> 1- UL 94 V-0 Flammability rated <b>B:</b> 1- No Pressure Sensitive Adhesive (PSA) 2- With PSA and Extended Liner 3- With PSA Only (No 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	Profile Number	Standard length of strip is 96 in. Pricing is by the foot (YYYYY= 09600) Cut to length options available
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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



Table 3 - Stealth Profiles

Profile	Height inches	Height mm	Width inches	Width mm
3902	0.070	1.78	0.564	14.33
3844	0.080	2.03	0.500	12.70
3856	0.080	2.03	0.300	7.62
3845	0.080	2.03	0.675	17.15
3840	0.100	2.54	0.300	7.62
3823	0.100	2.54	0.394	10.01
3922	0.110	2.79	0.620	15.75
3828	0.120	3.05	0.320	8.13
3890	0.120	3.05	0.400	10.16



Stealth Profiles (Continued)

Profile	Height inches	Height mm	Width inches	Width mm
3926	0.122	3.10	0.255	6.48
3850	0.134	3.40	0.625	15.88
3839	0.140	3.56	0.500	12.70
3891	0.157	3.99	0.5	12.70
3842	0.197	5.00	0.675	17.15
3894	0.215	5.46	0.500	12.70
3995	0.285	7.24	0.650	16.51
3913	0.350	8.89	0.629	15.98

# Product Information

## SOFT-SHIELD® 3500 - Available Profiles

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

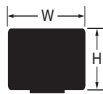
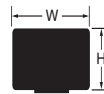


Table 4 - Rectangle Profiles

Profile	Height inches	Height mm	Width inches	Width mm
3042	0.015	0.38	0.472	11.99
3268	0.020	0.51	0.157	3.99
3216	0.020	0.51	0.197	5.00
3232	0.020	0.51	0.394	10.01
3273	0.020	0.51	0.500	12.70
3442	0.020	0.51	0.925	23.50
3211	0.039	0.99	0.118	3.00
3214	0.039	0.99	0.157	3.99
3217	0.039	0.99	0.197	5.00
3217	0.039	0.99	0.197	5.00
3224	0.039	0.99	0.276	7.01
3224	0.039	0.99	0.276	7.01
3230	0.039	0.99	0.315	8.00
3233	0.039	0.99	0.394	10.01
3392	0.039	0.99	0.512	13.00
3420	0.039	0.99	0.709	18.01
3455	0.039	0.99	0.925	23.50
3291	0.039	0.99	1.142	29.01
9184	0.039	0.99	1.142	29.01
3234	0.047	1.19	0.394	10.01
3434	0.050	1.27	1.320	33.53
3370	0.059	1.50	0.157	3.99
3219	0.059	1.50	0.197	5.00
3241	0.059	1.50	0.512	13.00
3418	0.060	1.52	0.118	3.00
3226	0.060	1.52	0.275	6.99
3389	0.060	1.52	0.394	10.01
3426	0.060	1.52	0.394	10.01
3471	0.060	1.52	0.670	17.02
3101	0.078	1.98	0.118	3.00
3104	0.078	1.98	0.157	3.99
3120	0.078	1.98	0.236	5.99
3136	0.078	1.98	0.315	8.00
3136	0.078	1.98	0.315	8.00
3258	0.078	1.98	1.378	35.00
3109	0.079	2.01	0.197	5.00
3133	0.079	2.01	0.276	7.01
3151	0.079	2.01	0.394	10.01



Rectangle Profiles (Continued)

Profile	Height inches	Height mm	Width inches	Width mm
3164	0.079	2.01	0.472	11.99
3187	0.079	2.01	0.591	15.01
3248	0.079	2.01	0.827	21.01
3402	0.079	2.01	0.984	24.99
3435	0.090	2.29	0.100	2.54
3110	0.098	2.49	0.197	5.00
3335	0.098	2.49	0.512	13.00
3249	0.098	2.49	0.826	20.98
3463	0.100	2.54	0.375	9.53
3102	0.118	3.00	0.118	3.00
9085	0.118	3.00	0.118	3.00
9085	0.118	3.00	0.118	3.00
3106	0.118	3.00	0.157	3.99
3153	0.118	3.00	0.394	10.01
3153	0.118	3.00	0.394	10.01
3424	0.120	3.05	1.610	40.89
3148	0.125	3.18	0.375	9.53
3173	0.125	3.18	0.500	12.70
3173	0.125	3.18	0.500	12.70
3421	0.125	3.18	1.000	25.40
3439	0.125	3.18	1.850	46.99
3472	0.125	3.18	2.000	50.80
3108	0.126	3.20	0.189	4.80
3128	0.126	3.20	0.252	6.40
3128	0.126	3.20	0.252	6.40
9022	0.126	3.20	0.252	6.40
3195	0.126	3.20	0.626	15.90
3557	0.134	3.40	0.689	17.50
3145	0.137	3.48	0.354	8.99
3298	0.138	3.51	0.197	5.00
3469	0.138	3.51	0.826	20.98
3336	0.138	3.51	0.512	13.00
3107	0.157	3.99	0.157	3.99
3129	0.157	3.99	0.250	6.35
3138	0.157	3.99	0.315	8.00
3318	0.157	3.99	0.354	8.99
3154	0.157	3.99	0.394	10.01
3154	0.157	3.99	0.394	10.01

# Product Information

## SOFT-SHIELD® 3500 - Available Profiles



Table 5 - Rectangle Profiles (Continued)

Profile	Height inches	Height mm	Width inches	Width mm
3423	0.160	4.06	0.577	14.66
3113	0.197	5.00	0.197	5.00
3139	0.197	5.00	0.315	8.00
3156	0.197	5.00	0.394	10.01
3156	0.197	5.00	0.394	10.01
3190	0.197	5.00	0.591	15.01
3126	0.236	5.99	0.236	5.99
9111	0.236	5.99	0.236	5.99
3149	0.250	6.35	0.375	9.53
3174	0.250	6.35	0.500	12.70
3270	0.251	6.38	0.251	6.38
3338	0.255	6.48	0.512	13.00
3572	0.255	6.48	1.000	25.40
3300	0.276	7.01	0.276	7.01
3323	0.276	7.01	0.394	10.01
9159	0.276	7.01	0.276	7.01
3323	0.276	7.01	0.394	10.01
3339	0.276	7.01	0.512	13.00
3159	0.315	8.00	0.394	10.01
3299	0.370	9.40	0.250	6.35
3150	0.375	9.53	0.375	9.53
3175	0.375	9.53	0.500	12.70
3313	0.394	10.01	0.315	8.00
3161	0.394	10.01	0.394	10.01



Rectangle Profiles (Continued)

Profile	Height inches	Height mm	Width inches	Width mm
3358	0.394	10.01	0.787	19.99
3342	0.413	10.49	0.512	13.00
3314	0.472	11.99	0.315	8.00
3346	0.472	11.99	0.590	14.99
3176	0.500	12.70	0.500	12.70
9118	0.500	12.70	1.181	30.00
3162	0.512	13.00	0.394	10.01
3529	0.590	14.99	0.394	10.01
3532	0.669	16.99	0.500	12.70
3438	0.740	18.80	0.510	12.95
9011	0.740	18.80	0.510	12.95
4063	0.748	19.00	0.629	15.98
3461	0.750	19.05	0.250	6.35
3527	0.787	19.99	0.750	19.05
3360	0.787	19.99	0.787	19.99
3239	0.826	20.98	0.314	7.98
3235	0.866	22.00	0.375	9.53
3223	0.866	22.00	0.787	19.99
3103	0.905	22.99	0.500	12.70
9009	1.000	25.40	0.750	19.05
3228	1.023	25.98	0.393	9.98
3544	1.140	28.96	1.180	29.97
3486	1.375	34.93	0.750	19.05
3142	1.575	40.01	0.750	19.05



Table 6 - C-Fold Profiles

Profile	Height inches	Height mm	Width inches	Width mm
3848	0.236	5.99	0.236	5.99
3803	0.315	8.00	0.315	8.00
3843	0.315	8.00	0.315	8.00
3806	0.385	9.78	0.421	10.69
3836	0.395	10.03	0.430	10.92
3834	0.400	10.16	0.430	10.92
3830	0.465	11.81	0.421	10.69
3901	0.465	11.81	0.421	10.69
3822	0.465	11.81	0.421	10.69
3807	0.675	17.15	0.580	14.73



Table 7 - P-Shape Profiles

Profile	Height inches	Height mm	Width inches	Width mm
3816	0.130	3.30	0.520	13.21
3898	0.145	3.68	0.52	13.21
3895	0.165	4.19	0.52	13.21
3877	0.200	5.08	0.520	13.21

# Product Information

## SOFT-SHIELD® 3500 - Available Profiles



Table 8 - D-Shape Profiles

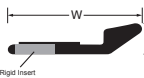
Profile	Height inches	Height mm	Width inches	Width mm
3607	0.060	1.52	0.150	3.81
3664	0.070	1.78	0.180	4.57
3674	0.075	1.91	0.150	3.81
3610	0.079	2.01	0.197	5.00
3628	0.079	2.01	0.394	10.01
3601	0.090	2.29	0.091	2.31
3601	0.090	2.29	0.091	2.31
3648	0.090	2.29	0.150	3.81
3671	0.100	2.54	0.250	6.35
3669	0.110	2.79	0.225	5.72
3608	0.118	3.00	0.150	3.81
3622	0.118	3.00	0.354	8.99
3629	0.118	3.00	0.394	10.01
3651	0.120	3.05	0.250	6.35
3624	0.125	3.18	0.375	9.53
9101	0.125	3.18	0.375	9.53
3682	0.130	3.30	0.188	4.78
3616	0.134	3.40	0.256	6.50



D-Shape Profiles (Continued)

Profile	Height inches	Height mm	Width inches	Width mm
3684	0.138	3.51	0.394	10.01
9106	0.138	3.51	0.394	10.01
3650	0.142	3.61	0.252	6.40
3668	0.150	3.81	0.354	8.99
3685	0.157	3.99	0.500	12.70
9023	0.157	3.99	0.150	3.81
3649	0.157	3.99	0.236	5.99
3666	0.157	3.99	0.150	3.81
3631	0.177	4.50	0.393	9.98
3620	0.189	4.80	0.299	7.59
3611	0.196	4.98	0.196	4.98
3617	0.197	5.00	0.256	6.50
3626	0.250	6.35	0.375	9.53
3662	0.250	6.35	0.250	6.35
3626	0.250	6.35	0.375	9.53
3643	0.375	9.53	0.500	12.70
3694	0.500	12.70	0.500	12.70

Table 9 - Knife-Edge Profiles



Profile	Height inches	Height mm	Width inches	Width mm
3941	0.105	2.67	0.32	8.13
3826	0.106	2.69	0.445	11.30
3837	0.106	2.69	0.445	11.30
3893	0.106	2.69	0.320	8.13
3811	0.252	6.40	0.751	19.08

Table 10 - Other Profiles

Profile	Height inches	Height mm	Width inches	Width mm	Profile Shape
9088	0.118	3.00	1.575	40.01	Spec.
3914	0.152	3.86	0.250	6.35	"T"
3849	0.394	10.01	0.590	14.99	"L"
9005	0.157	3.99	0.257	6.53	"L"
3860	0.181	4.60	0.244	6.20	"T"
3962	0.157	3.99	0.301	7.65	Clip
3985	0.110	2.79	0.283	7.19	Clip