

Fabric Shielding Gaskets





EMI Shielding Gaskets for Electronic Enclosures

Shielding gaskets are, very simply, connectors of two opposing metallic planes which make them appear as one continuous surface, by connecting across the openings. Depending on the frequencies involved, the openings must be reduced as closely as possible to a continuous seal.

Leader Tech's unique Fabric Shielding Gasket structure is a combination of a highly conductive nickel/copper ripstop fabric and a resilient polyurethane foam core. Leader Tech's FSG products have superior shielding properties and ensure long performance life all in a cost effective manner.



Benefits of Fabric Shielding Gaskets (FSG)

- Excellent shielding effectiveness
- Extremely low compression force allows for use of lighter materials and less fastening and hinge hardware
- Low Surface Resistivity provides excellent conductivity
- Abrasion resistant metalized fabric for durable performance
- Low compression set ensures long term reliability of gasket performance
- Profile and I/O gaskets are available with PSA tapes which facilitates quick assembly
- Designed for use with non-conductive pressure sensitive adhesive for better adhesion
- FSG products can be ordered from 24" or 48" stock, cut to specific lengths or kiss cut on release liner
- Over 100 sizes to choose from in a variety of profiles
- Many profiles can be mitered and bonded as a frame gasket
- Prototype samples can be provided within 24 hours



Fabric Shielding Gaskets assure tight EMI electrical contact sealing of electronic enclosures with high speed microprocessors.

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ISO 9001: 2008



Rectangle Shape Fabric Shielding Gaskets

Shielding Effectiveness 80 - 115dB

Frequency Range 20Mhz - 1GHz

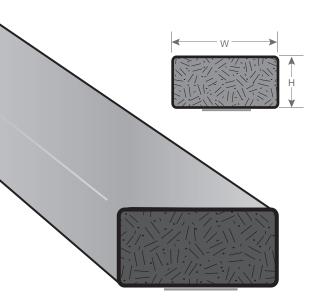
Low Compression

See page 18 for typical performance

Dura-Layer Construction

Resiliant base with high-performance fabric

Recommended Compression 30-50% of gasket height



RECTANGLE SHAPE

with pressure sensitive adhesive mounting.

Low profiles with low compression force for applications with small gaps and larger profiles for applications on cabinets and large enclosures.

Larger profiles are commonly used in groove mounted applications.

Available in standard 24" and 48" lengths or cut to length as desired.

Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See page 5 for part number explanation and typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|------------|--------|------|--------|-------|
| SG015200R | 0.015 | 0.38 | 0.200 | 5.08 |
| SG020157R | 0.020 | 0.51 | 0.157 | 3.99 |
| \$G020197R | 0.020 | 0.51 | 0.197 | 5.00 |
| SG020275R | 0.020 | 0.51 | 0.275 | 6.99 |
| SG039118R | 0.039 | 0.99 | 0.118 | 3.00 |
| SG040125R | 0.040 | 1.02 | 0.125 | 3.18 |
| SG040200R | 0.040 | 1.02 | 0.200 | 5.08 |
| SG040275R | 0.040 | 1.02 | 0.275 | 6.99 |
| SG040395R | 0.040 | 1.02 | 0.395 | 10.03 |
| SG040500R | 0.040 | 1.02 | 0.500 | 12.70 |
| SG040600R | 0.040 | 1.02 | 0.600 | 15.24 |
| SG040710R | 0.040 | 1.02 | 0.710 | 18.03 |
| \$G050090R | 0.050 | 1.27 | 0.090 | 2.29 |
| SG060125R | 0.060 | 1.52 | 0.125 | 3.18 |

Continued on page 5.

Rectangle Shape Fabric Shielding Gaskets

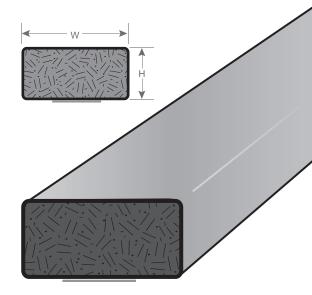
| Part | H (in) | (mm) | W (in) | (mm) |
|------------|--------|------|--------|-------|
| \$G060160R | 0.060 | 1.52 | 0.160 | 4.06 |
| \$G060200R | 0.060 | 1.52 | 0.200 | 5.08 |
| SG060280R | 0.060 | 1.52 | 0.280 | 7.11 |
| \$G060395R | 0.060 | 1.52 | 0.395 | 10.03 |
| SG060550R | 0.060 | 1.52 | 0.550 | 13.97 |
| SG060750R | 0.060 | 1.52 | 0.750 | 19.05 |
| SG079157R | 0.079 | 2.00 | 0.157 | 3.99 |
| SG080200R | 0.080 | 2.03 | 0.200 | 5.08 |
| SG080275R | 0.080 | 2.03 | 0.275 | 6.99 |
| SG080395R | 0.080 | 2.03 | 0.395 | 10.03 |
| SG080500R | 0.080 | 2.03 | 0.500 | 12.70 |
| SG080750R | 0.080 | 2.03 | 0.750 | 19.05 |
| SG100200R | 0.100 | 2.54 | 0.200 | 5.08 |
| SG120155R | 0.120 | 3.05 | 0.155 | 3.94 |
| SG125250R | 0.125 | 3.18 | 0.250 | 6.35 |
| SG125375R | 0.125 | 3.18 | 0.375 | 9.53 |
| SG160354R | 0.160 | 4.06 | 0.354 | 8.99 |
| SG187375R | 0.187 | 4.75 | 0.375 | 9.53 |
| SG187750R | 0.187 | 4.75 | 0.750 | 19.05 |
| SG250375R | 0.250 | 6.35 | 0.375 | 9.53 |
| SG250500R | 0.250 | 6.35 | 0.500 | 12.70 |
| SG250600R | 0.250 | 6.35 | 0.600 | 15.24 |
| SG375500R | 0.375 | 9.53 | 0.500 | 12.70 |

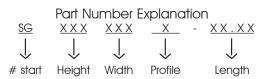
TYPICAL CROSS SECTION TOLERANCES

 $\pm.010$ in. (0.25 mm) for all dimensions up to 0.04 in. (1.02 mm) $\pm.020$ in. (0.50 mm) for all dimensions above 0.04 in. (1.02 mm) Detailed part drawings are available upon request.

TYPICAL LENGTH TOLERANCES

| 0.20 to 6.00 in. | (5 - 152 mm) | ±.03 in. | (0.76 mm) |
|--------------------|-----------------|----------|-----------|
| 6.01 to 18.00 in. | (153 - 457 mm) | ±.06 in. | (1.52 mm) |
| 18.01 to 48.00 in. | (458 - 1219 mm) | ±.08 in. | (2.03 mm) |





*Example:

SG125250R-22.50: Gasket .125 tall, .250 wide, Rectangle Shape and 22.5" long

Frequency Range 20Mhz - 1GHz

Low Compression

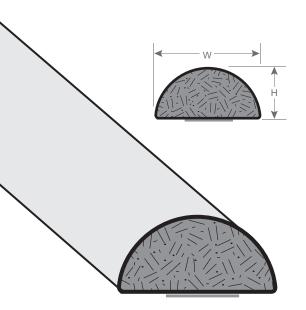
See page 18 for typical performance

Dura-Layer Construction

Resiliant base with high-performance fabric

Recommended Compression

30-50% of gasket height



D-SHAPE

with pressure sensitive adhesive mounting.

Universally functional for most applications - our most popular style.

The D Shape allows omni-directional compression loading from any angle.

Cross-sectional profile is scaled for optimum compression/contact resistance properties.

Larger profiles are commonly used in groove mounted applications.

Available in standard 24" and 48" lengths or cut to length as desired.

Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See page 7 for part number explanation and typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|-----------|--------|------|--------|-------|
| SG040150D | 0.040 | 1.02 | 0.150 | 3.81 |
| SG050140D | 0.050 | 1.27 | 0.140 | 3.56 |
| SG050250D | 0.050 | 1.27 | 0.250 | 6.35 |
| SG060125D | 0.060 | 1.52 | 0.125 | 3.18 |
| SG060150D | 0.060 | 1.52 | 0.150 | 3.81 |
| SG070135D | 0.070 | 1.78 | 0.135 | 3.43 |
| SG070180D | 0.070 | 1.78 | 0.180 | 4.57 |
| SG080080D | 0.080 | 2.03 | 0.080 | 2.03 |
| SG080160D | 0.080 | 2.03 | 0.160 | 4.06 |
| SG080394D | 0.080 | 2.03 | 0.394 | 10.01 |
| SG090090D | 0.090 | 2.29 | 0.090 | 2.29 |
| SG090150D | 0.090 | 2.29 | 0.150 | 3.81 |

Continued on page 7.

Tabric Shielding Gaskets

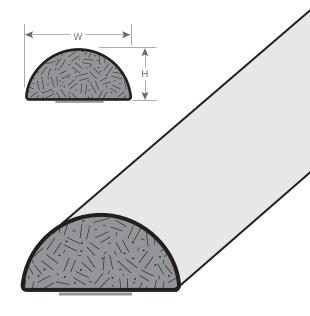
| Part | H (in) | (mm) | W (in) | (mm) |
|------------|--------|-------|--------|-------|
| \$G100300D | 0.100 | 2.54 | 0.300 | 7.62 |
| \$G110180D | 0.110 | 2.79 | 0.180 | 4.57 |
| \$G120150D | 0.120 | 3.05 | 0.150 | 3.81 |
| \$G120475D | 0.120 | 3.05 | 0.475 | 12.07 |
| \$G125187D | 0.125 | 3.18 | 0.187 | 4.75 |
| \$G125250D | 0.125 | 3.18 | 0.250 | 6.35 |
| \$G130190D | 0.130 | 3.30 | 0.190 | 4.83 |
| \$G140250D | 0.140 | 3.56 | 0.250 | 6.35 |
| \$G150250D | 0.150 | 3.81 | 0.250 | 6.35 |
| \$G160240D | 0.160 | 4.06 | 0.240 | 6.10 |
| \$G180400D | 0.180 | 4.57 | 0.400 | 10.16 |
| SG187250D | 0.187 | 4.75 | 0.250 | 6.35 |
| \$G195260D | 0.195 | 4.95 | 0.260 | 6.60 |
| SG236236D | 0.236 | 5.99 | 0.236 | 5.99 |
| \$G250375D | 0.250 | 6.35 | 0.375 | 9.53 |
| \$G295355D | 0.295 | 7.49 | 0.355 | 9.02 |
| SG315630D | 0.315 | 8.00 | 0.630 | 16.00 |
| SG375500D | 0.375 | 9.53 | 0.500 | 12.70 |
| \$G430500D | 0.430 | 10.92 | 0.500 | 12.70 |
| \$G562709D | 0.562 | 14.27 | 0.709 | 18.01 |
| \$G670670D | 0.670 | 17.02 | 0.670 | 17.02 |

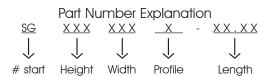
TYPICAL CROSS SECTION TOLERANCES

 $\pm .010$ in. (0.25 mm) for all dimensions up to 0.04 in. (1.02 mm) $\pm .020$ in. (0.50 mm) for all dimensions above 0.04 in. (1.02 mm) Detailed part drawings are available upon request.

TYPICAL LENGTH TOLERANCES

| 0.20 to 6.00 in. 6.01 to 18.00 in. | (5 - 152 mm) (153 - 457 mm) | ±.03 in. ±.06 in. | (0.76 mm) (1.52 mm) |
|---------------------------------------|--------------------------------|----------------------|------------------------|
| 18.01 to 48.00 in. | (458 - 1219 mm) | ±.08 in. | (2.03 mm) |





*Example:

SG125250D-22.50: Gasket .125 tall, .250 wide, D-Shape and 22.5" long

Square Shape Fabric Shielding Gaskets

Shielding Effectiveness 80 - 115dB

Frequency Range 20Mhz - 1GHz

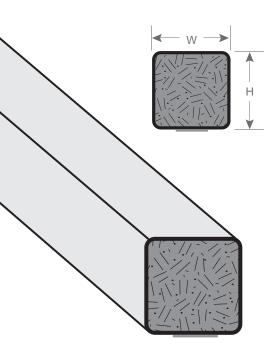
Low Compression

See page 18 for typical performance

Dura-Layer Construction

Resiliant base with high-performance fabric

Recommended Compression 30-50% of gasket height



SQUARE SHAPE

with pressure sensitive adhesive mounting.

Low profiles with low compression force for applications with small gaps and larger profiles for applications on cabinets and large enclosures.

Larger profiles are commonly used in groove mounted applications.

Available in standard 24" and 48" lengths or cut to length as desired.

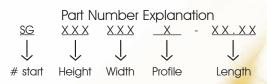
Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See below for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|-----------|--------|-------|--------|-------|
| SG080080S | 0.080 | 2.03 | 0.080 | 2.03 |
| SG118118S | 0.118 | 3.00 | 0.118 | 3.00 |
| SG160160S | 0.160 | 4.06 | 0.160 | 4.06 |
| SG200200S | 0.200 | 5.08 | 0.200 | 5.08 |
| SG250250S | 0.250 | 6.35 | 0.250 | 6.35 |
| SG375375S | 0.375 | 9.53 | 0.375 | 9.53 |
| SG500500S | 0.500 | 12.70 | 0.500 | 12.70 |
| SG670670S | 0.670 | 17.02 | 0.670 | 17.02 |
| SG787787S | 0.787 | 19.99 | 0.787 | 19.99 |



^{*}Example:

SG250250S-22.50: Gasket .250 tall, .250 wide, Square Shape and 22.5" long



Frequency Range 20Mhz - 1GHz

Low Compression

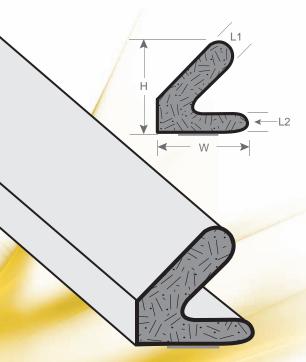
See page 18 for typical performance

Dura-Laver Construction

Resiliant base with high-performance fabric

Recommended Compression 50-60% of gask

50-60% of gasket height



C-FOLD SHAPE

with pressure sensitive adhesive mounting.

C-Fold profiles are popular for larger gap applications where low compression force is desired.

Large profiles are ideal for cabinet and enclosure applications.

Available in standard 24" and 48" lengths or cut to length as desired.

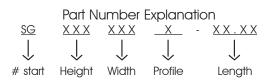
Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See below for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) | LT | L2 |
|-----------|--------|-------|--------|-------|------|------|
| SG196325C | 0.196 | 4.98 | 0.325 | 8.26 | .120 | .040 |
| SG196535C | 0.196 | 4.98 | 0.535 | 13.59 | .100 | .040 |
| SG240415C | 0.240 | 6.10 | 0.415 | 10.54 | .100 | .040 |
| SG252280C | 0.252 | 6.40 | 0.280 | 7.11 | .100 | .040 |
| SG315315C | 0.315 | 8.00 | 0.315 | 8.00 | .125 | .060 |
| SG380420C | 0.380 | 9.65 | 0.420 | 10.67 | .115 | .060 |
| SG465420C | 0.465 | 11.81 | 0.420 | 10.67 | .120 | .060 |
| SG550590C | 0.550 | 13.97 | 0.590 | 14.99 | .120 | .060 |
| SG675600C | 0.675 | 17.15 | 0.600 | 15.24 | .120 | .060 |



^{*}Example:

SG252280C-22.50: Gasket .252 tall, .280 wide, C-Fold Shape and 22.5" long

Bell Shape Fabric Shielding Gaskets

Shielding Effectiveness 80 - 115dB

Frequency Range 20Mhz - 1GHz

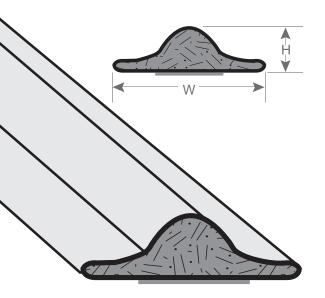
Low Compression

See page 18 for typical performance

Dura-Layer Construction

Resiliant base with high-performance fabric

Recommended Compression 30-50% of gasket height



BELL SHAPE

with pressure sensitive adhesive mounting.

Available in standard 24" and 48" lengths or cut to length as desired.

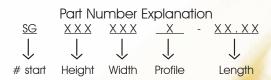
Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See below for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|-----------|--------|------|--------|-------|
| SG070180B | 0.070 | 1.78 | 0.180 | 4.57 |
| SG090315B | 0.090 | 2.29 | 0.315 | 8.00 |
| SG100300B | 0.100 | 2.54 | 0.300 | 7.62 |
| SG130256B | 0.130 | 3.30 | 0.256 | 6.50 |
| SG157500B | 0.157 | 3.99 | 0.500 | 12.70 |
| SG200500B | 0.200 | 5.08 | 0.500 | 12.70 |



*Example:

SG100300B-22.50: Gasket .100 tall, .300 wide, Bell shape and 22.5" long



Frequency Range 20Mhz - 1GHz

Low Compression See page 18 for typical performance

Dura-Layer Construction
Resiliant base with
high-performance fabric

Recommended Compression 30-50% of gasket height

KNIFE SHAPE

with pressure sensitive adhesive mounting.

Available in standard 24" and 48" lengths or cut to length as desired.

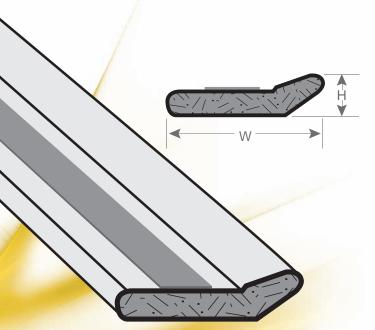
Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See below for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|------------|--------|------|--------|-------|
| SG070340K | 0.070 | 1.78 | 0.340 | 8.64 |
| SG106315K | 0.106 | 2.69 | 0.315 | 8.00 |
| SG106445K | 0.106 | 2.69 | 0.445 | 11.30 |
| SG160600K | 0.160 | 4.06 | 0.600 | 15.24 |
| \$G250750K | 0.250 | 6.35 | 0.750 | 19.05 |
| SG312707K | 0.312 | 7.92 | 0.707 | 17.96 |
| SG350750K | 0.350 | 8.89 | 0.750 | 19.05 |



| Part Number Explanation | | | | | | |
|-------------------------|--------|-------------------|--------------|--------------|--|--|
| <u>SG</u> | X X X | X X X | X | <u> </u> | | |
| | | | \downarrow | \downarrow | | |
| # start | Height | V Width | Profile | Length | | |

*Example:

SG106445K-22.50: Gasket .106 tall, .445 wide, Knife Shape and 22.5" long

P-Shape Fabric Shielding Gaskets

Shielding Effectiveness 80 - 115dB

Frequency Range 20Mhz - 1GHz

Low Compression See page 18 for typical

performance

Dura-Layer Construction

Resiliant base with high-performance fabric

Recommended Compression 30-50% of gasket height

P-SHAPE

with pressure sensitive adhesive mounting.

Available in standard 24" and 48" lengths or cut to length as desired.

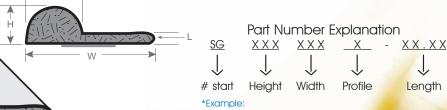
Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See below for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) | L1 (in) | (mm) | L (in) | (mm) |
|-----------|--------|------|--------|-------|---------|------|--------|------|
| SG016195P | 0.016 | 0.41 | 0.195 | 4.95 | 0.070 | 1.78 | 0.005 | 0.13 |
| SG060275P | 0.060 | 1.52 | 0.275 | 6.99 | 0.118 | 3.00 | 0.014 | 0.35 |
| SG080200P | 0.080 | 2.03 | 0.200 | 5.08 | 0.118 | 3.00 | 0.020 | 0.50 |
| SG130520P | 0.130 | 3.30 | 0.520 | 13.21 | 0.260 | 6.60 | 0.039 | 1.00 |
| SG145520P | 0.145 | 3.68 | 0.520 | 13.21 | 0.252 | 6.40 | 0.039 | 1.00 |
| SG200395P | 0.200 | 5.08 | 0.395 | 10.03 | 0.157 | 4.00 | 0.079 | 2.00 |
| SG200475P | 0.200 | 5.08 | 0.475 | 12.07 | 0.157 | 4.00 | 0.079 | 2.00 |



SG130520P-22.50: Gasket .130 tall .520 wide, P-Shape and 22.5" long

Round & T-Shape Fabric Shielding Gaskets

Shielding Effectiveness 80 - 115dB

Frequency Range 20Mhz - 1GHz

Low Compression
See page 18 for typical performance

Dura-Layer Construction
Resiliant base with
high-performance fabric

Recommended Compression 30-50% of gasket height

ROUND SHAPE

Adhesive mounting not typical.

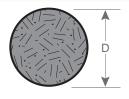
Available in standard 24" and 48" lengths or cut to length as desired.

Please consult factory for sizes not shown.

See page 12 for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | D (in) | (mm) |
|------------|--------|------|
| \$G100100Z | 0.100 | 2.54 |
| SG125125Z | 0.125 | 3.18 |
| SG160160Z | 0.160 | 4.06 |
| SG200200Z | 0.200 | 5.08 |





T-SHAPE

with pressure sensitive adhesive mounting.

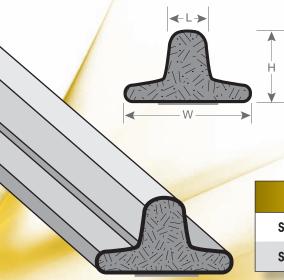
Available in standard 24" and 48" lengths or cut to length as desired.

Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See page 12 for part number explanation.

See page 19 for typical cross section and length tolerances.



| Part | H (in) | (mm) | W (in) | (mm) | L (in) | (mm) |
|-----------|--------|------|--------|------|--------|------|
| SG152235T | 0.152 | 3.86 | 0.235 | 5.97 | 0.050 | 1.27 |
| SG157245T | 0.157 | 3.99 | 0.245 | 6.22 | 0.050 | 1.27 |

WK Oval & Triangle Shape

Fabric Shielding Gaskets

Shielding Effectiveness 80 - 115dB

Frequency Range 20Mhz - 1GHz

Low Compression

See page 18 for typical performance

Dura-Layer Construction

Resiliant base with high-performance fabric

Recommended Compression 30-50% of gasket height

OVAL SHAPE

with pressure sensitive adhesive mounting.

Available in standard 24" and 48" lengths or cut to length as desired.

Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See page 12 for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|-----------|--------|------|--------|-------|
| SG140200E | 0.140 | 3.56 | 0.200 | 5.08 |
| SG160790E | 0.160 | 4.06 | 0.790 | 20.07 |
| W | 1 | | | |
| | | | | |

TRIANGLE SHAPE

with pressure sensitive adhesive mounting.

Available in standard 24" and 48" lengths or cut to length as desired.

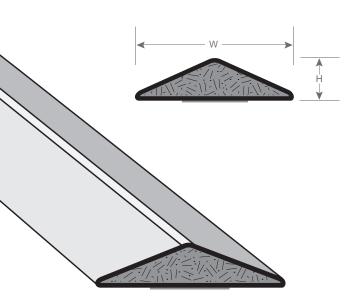
Conductive tape and products without tape can also be supplied. Contact factory for ordering information.

Please consult factory for sizes not shown.

See page 12 for part number explanation.

See page 19 for typical cross section and length tolerances.

| Part | H (in) | (mm) | W (in) | (mm) |
|------------|--------|------|--------|-------|
| SG098500TR | 0.098 | 2.49 | 0.500 | 12.70 |
| SG140390TR | 0.140 | 3.56 | 0.390 | 9.91 |



Frequency Range 20Mhz - 1GHz

Low Compression
See page 18 for typical performance

Dura-Layer ConstructionResiliant base with high-performance fabric

Recommended Compression 30-50% of gasket height

D-SUB MINIATURE

very conformable to irregular surfaces.

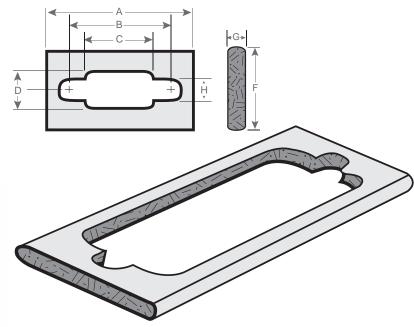
Eliminates any gap problem between connector and I/O surface plates. Compresses from .100" to .025" (2,5 to 0,6mm).

Outside conductive surface is metalized CuNi fabric.

9, 15, 25, 37 and 50 pin connector gaskets available in stock.

Available with adhesive tape. Please consult factory for ordering information.

Consult factory for sizes not shown.



| Part | Туре | , | Α | В | | С | | D | | E | | F | | G | | н | |
|------------|--------|------|------|------|------|------|------|-----|------|-----|-----|-----|------|------|-----|-----|-----|
| SG140009DS | 9 Pin | 1.40 | 35.6 | .98 | 24.9 | .78 | 19.8 | .44 | 11.2 | .22 | 5.6 | .70 | 17.8 | .100 | 2.5 | .15 | 3.8 |
| SG175015DS | 15 Pin | 1.75 | 44.5 | 1.31 | 33.3 | 1.11 | 28.2 | .44 | 11.2 | .22 | 5.6 | .70 | 17.8 | .100 | 2.5 | .15 | 3.8 |
| SG228025DS | 25 Pin | 2.28 | 57.9 | 1.85 | 7.0 | 1.65 | 41.9 | .44 | 11.2 | .22 | 5.6 | .70 | 17.8 | .100 | 2.5 | .15 | 3.8 |
| SG293037DS | 37 Pin | 2.93 | 74.4 | 2.50 | 63.5 | 2.29 | 58.2 | .44 | 11.2 | .22 | 5.6 | .70 | 17.8 | .100 | 2.5 | .15 | 3.8 |
| SG284050DS | 50 Pin | 2.84 | 72.1 | 2.41 | 61.2 | 2.20 | 55.9 | .55 | 14.0 | .28 | 7.1 | .80 | 20.3 | .100 | 2.5 | .15 | 3.8 |

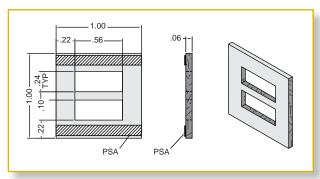
I/ I/O Back Panel Profiles

Fabric Shielding Gaskets

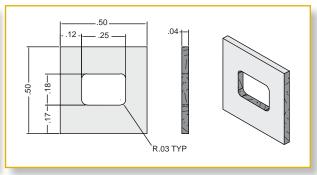
I/O BACK PANEL PROFILES

Leader Tech offers a variety of standard I/O gaskets in a variety of configurations for computer and instrumentation applications. These profiles are made from .040" or .060" thick Leader Tech FSG material and can be made to custom shapes, sizes and thicknesses as well. PSA is standard on many profiles and available on all designs upon request. Leader Tech FSG I/O gaskets are all UL94-VO rated and RoHS compliant.

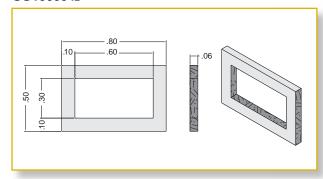
SG100001I



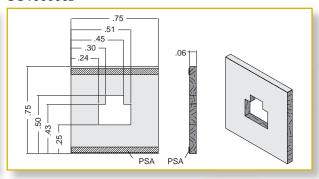
SG100003I



SG100004I



SG100005I



Shielding Fabrics & Conductive Tapes

SHIELDING FABRICS

Shielding effectiveness is determined by a combination of the reflection and absorption of RF signals. Absorption depends on the thickness of the shield material. However, reflection occurs at the shield surface and its effectiveness is independent of thickness. Reflection is the determining factor for all high frequency signal attenuation. (Note: When using these materials for conductive shielding gaskets, conductivity is the determinant.) Maximum reflection occurs with the highest conductivity materials – the best being copper, nickel and combinations of both.

Applications

Bonding or laminating to complex geometric shapes with optional hot melt or conductive adhesive.

- · Large surface coverage with minimal seams due to 41" material width
- ESD/RFI-EMI shielding attenuation > 70dB up to 10 GHz for CuNi type
- · Seal enclosure panels and frames, seams or joints
- · Use for architectural shielding or shielded room wall and ceiling finishing

Options

- All materials are available in non-adhesive, hot melt or conductive adhesive backing
- Standard sheets are 41" x 36" (1041 x 914 mm)
- Longer lengths can be custom ordered please consult factory for information
- Full rolls are 325' (99M) long please consult factory for ordering information. Note: conductive adhesive versions are 164' (50M) long



| Part Number w/o Adhesive | w/Hot Melt Adhesive | w/Conductive Adhesive | | | ness | Surface Resistivity | 500KHz | 100MHz | 2 300MH | z 1GHz | | | | |
|-----------------------------|------------------------|--------------------------|--------------------------|----|------|------------------------|--------|--------|---------|--------------------------|------|------|------|------|
| SF005PCN | SF005PCN-HM | SF005PCN-CA | Conductive CuNi Cloth | 41 | 1041 | 36 | 914 | 0.003 | 0.08 | .005 ohm/mm ² | 79dB | 81dB | 86dB | 82dB |
| SF030PCU | SF030PCU-HM | SF030PCU-CA | Conductive Cu Cloth | 41 | 1041 | 36 | 914 | 0.003 | 0.08 | .035 ohm/mm ² | 60dB | 67dB | 65dB | 62dB |
| SF050PNI | SF050PNI-HM | SF050PNI-CA | Conductive Ni Cloth | 41 | 1041 | 36 | 914 | 0.004 | 0.10 | .050 ohm/mm ² | 60dB | 72dB | 67dB | 63dB |



FABRIC SHIELDING TAPES

Applications

Cable shielding, enclosure seams, shielded room joints, PCB component shields, irregular surface/component shields, alternative to custom die-cut shielding gaskets or sections.

- Service Temperature: -40°F to 212°F (-40°C to 100°C)
- Adhesion: (peel) 50 oz/in. (54N/100mm)
- Material: CuNi metalized fabric and conductive acrylic adhesive backing w/release liner

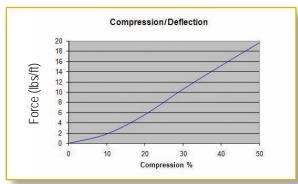
| Part | Width | | Width Thickness | | Leng | th | Resistivity | Impedance |
|-------------|-------|-------|-----------------|------|----------------|-------|------------------------|-------------|
| ST005PCN25 | .25 | 6.35 | .005 | 0.13 | 85.0 ft. rolls | 25.0m | 0.03 - 0.05 ohms/inch² | |
| ST005PCN50 | .50 | 12.7 | .005 | 0.13 | 85.0 ft. rolls | 25.0m | 0.03 - 0.05 ohms/inch² | 69dB@100MHz |
| ST005PCN75 | .75 | 19.05 | .005 | 0.13 | 85.0 ft. rolls | 25.0m | 0.03 - 0.05 ohms/inch² | 62dB@500MHz |
| ST005PCN100 | 1.00 | 25.4 | .005 | 0.13 | 85.0 ft. rolls | 25.0m | 0.03 - 0.05 ohms/inch² | |

Compression and Performance Data

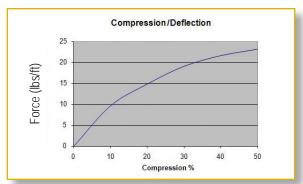
Typical Compression Deflection Performance Charts:

Compression/deflection curves are typical. Dimensions shown do not include pressure sensitive adhesive (.005 thick). Please contact factory for compression force data for parts not shown.

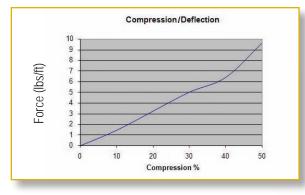
SG125250R



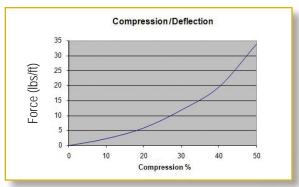
SG187375R



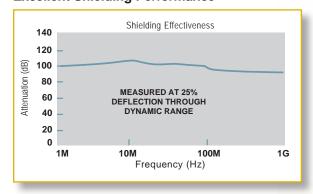
SG250375D



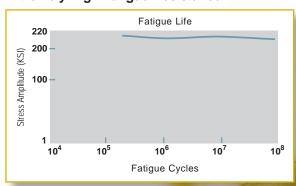
SG106445K



Excellent Shielding Performance



Extremely High Fatigue Resistance





Leader Tech (FSG):

Fabric: Nickel/Copper RipStop **Foam:** Open Cell Polyurethane

Compression Set: <15% (ASTM D3574)

Temperature Range: -40°F to 158°F (-40°C to 70°C) (ASTM D746)

Surface Resistivity: ≤0.050 Ω/inch² (ASTM F390)

Flammability Rating: UL94V0

Shielding Effectiveness: >80-115dB (MIL-STD 285 mod.)

Pressure Sensitive Adhesive: Non-conductive, high peel strength

ROHS: Compliant **REACH:** Compliant

Tolerances:

TYPICAL CROSS SECTION TOLERANCES

 $\pm.010$ in. (0.25 mm) for all dimensions up to 0.04 in. (1.02 mm) $\pm.020$ in. (0.50 mm) for all dimensions above 0.04 in. (1.02 mm) (Detailed part drawings are available upon request)

TYPICAL LENGTH TOLERANCES

For quotes, technical information or personal assistance, contact:



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Fax: 813.855.3291

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