SCHLEGEL
electronic materials

DEFINING EMI SOLUTIONS

www.schlegelemi.com

SEM, Inc.
806 Linden Avenue
Suite 100 (14625)
P.O. Box 20310
Rochester, NY 14602-0310
Tel: +1 585-643-2000
Fax: +1 585-427-7216
schlegelemi.na@schlegelemi.com

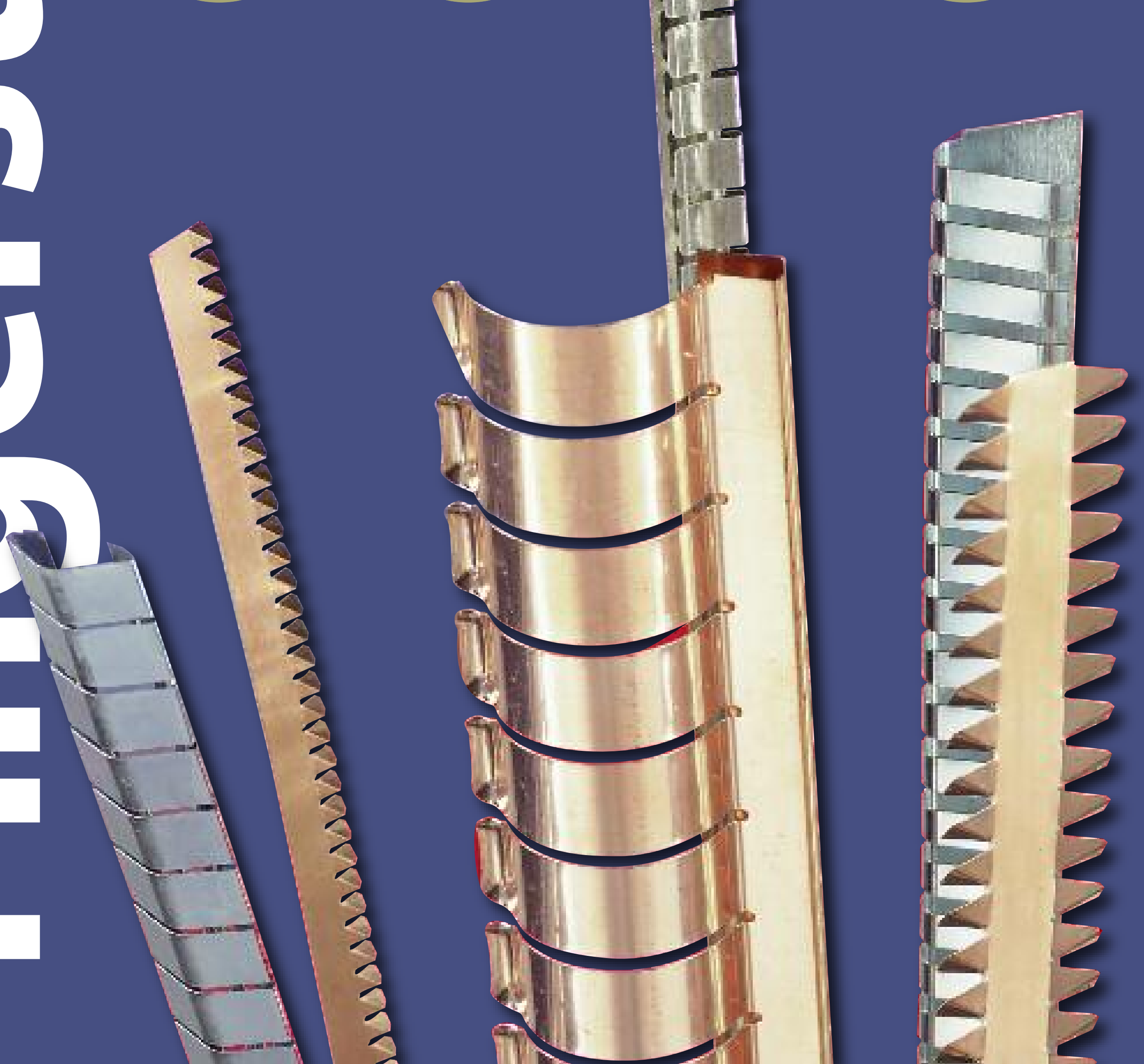
SEM Belgium bvba
Slijpesteenweg 28
8432 Middelkerke (Leffinge)
Belgium
Tel: +32 59 560 270
Fax: +32 59 560 271
schlegelbe@schlegelemi.com

SEM (Far East), Ltd.
Unit 3, 3/F, Block A
New Trade Plaza
6 On Ping Street
Shatin, N.T., Hong Kong
Tel: +852 2686 9872
Fax: +852 2686 9728
schlegelemi@emeigroup.com

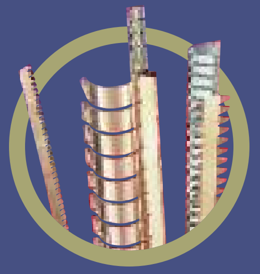
SCHLEGEL
electronic materials

Fingerstock

EMI FINGERSTOCK



Fingerstock



SEM'S FINGERSTOCK GASKETS

Think Schlegel EMI for Shielding

As the originator of the fabric-clad foam EMI shielding technology, Schlegel EMI is the industry's most trusted name. We continue to set the standard for quality and innovation, designing advanced solutions for a wide range of applications. And our worldwide locations ensure that you get what you need, when and where you need it.

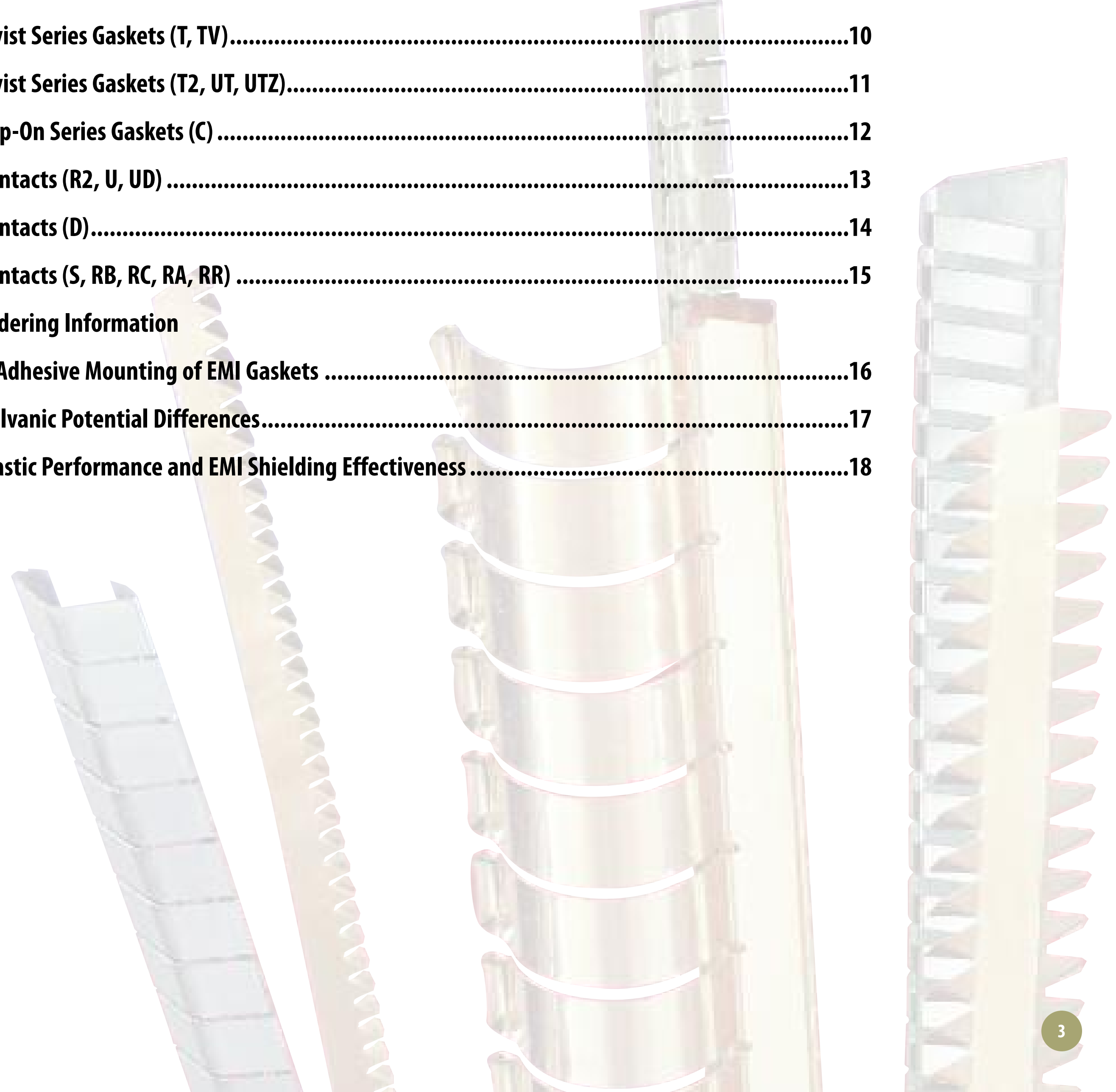
Modern electronic equipment often requires EMI Gaskets to avoid radiating EMI/RFI and to prevent susceptibility to outside sources of EMI/RFI. Maintaining electromagnetic compatibility can be an increasing challenge for the designers of today's electronic and electrical products.

Schlegel Electronic Materials, Inc. (SEM), the preeminent manufacturer of fabric over foam EMI shielding products for the computer, telecommunications, and electronics industries, offers a full range of EMI shielding products—including gaskets, I/O backplane shielding gaskets, and highly conductive envelopes, tapes and laminates. SEM is now proud to introduce a complete line of quality beryllium copper (BeCu) EMI Gaskets. The addition of BeCu Gaskets to SEM's extensive portfolio of shielding products allows SEM to be your exclusive EMI shielding supplier, to help you meet or exceed your global requirements for electromagnetic compatibility (EMC).

The mechanical spring characteristics of BeCu EMI Gaskets offer superior shielding effectiveness. These gaskets offer consistent performance and yield superb electrical spring contact within this industry.

SEM provides all the popular standard styles and sizes of BeCu gaskets. These gaskets operate in spaces from .010 inches up to .500 inches. SEM also offers many styles of soft gaskets that provide the low compression force needed in many applications. Custom spring contacts and gaskets are also available.

Table of Contents



PCI-VME Series GASKETS

Today's computer and telecommunications circuit cards demand increased EMI performance. The post heat-treated, post-plated beryllium copper (BeCu) gaskets exhibit improved performance and withstand thousands of insertion cycles without degradation.

The new 7-19PCI gasket was developed to improve the EMI seal between Compact PCI circuit card faceplates. This is accomplished by using a series of individual finger contacts rather than a continuous strip contact that had poor flexibility and suffered deformation over time. This improved design also reduced the force load buildup and allowed for easy card insertion in racks of 20+ circuit cards.

The new PCI-VME series offers these design features:

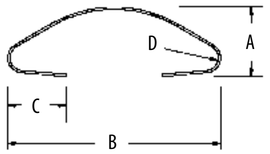
- A series of individual fingers to achieve maximum conformal contact.
- A single radius dome top profile to ease card loading and eliminate high stress in the contact area of the spring.
- The industry standard manufacturing process for BeCu fingerstock gaskets (post heat-treated and post-plated alloy 25).

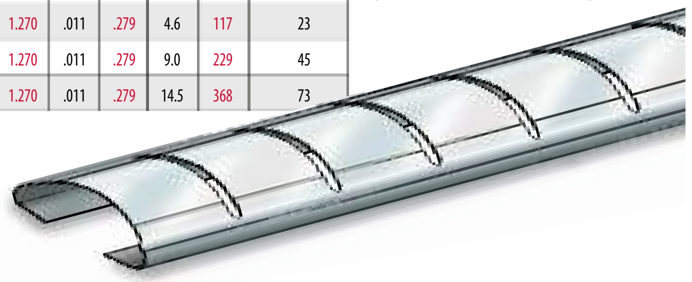
SEM offers two BeCu gasket sizes for extrusion variations and, for cost driven applications, both sizes are offered in stainless steel.

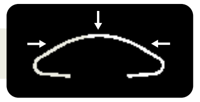
PCI-VME Series

Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		C		D		Length		Fingers
TPCI0619X04	.058	1.5	.186	4.7	.18	4.6	.2	5.08	.002	.051	.055	1.397	.009	.229	4.6	117	23
TPCI0619X09	.058	1.5	.186	4.7	.18	4.6	.2	5.08	.002	.051	.055	1.397	.009	.229	9.0	229	45
TPCI0619X14	.058	1.5	.186	4.7	.18	4.6	.2	5.08	.002	.051	.055	1.397	.009	.229	14.5	368	73
TPCI0619X04	.058	1.5	.186	4.7	.18	4.6	.2	5.08	.002	.051	.055	1.397	.009	.229	4.6	117	23
TPCI0619X09	.058	1.5	.186	4.7	.18	4.6	.2	5.08	.002	.051	.055	1.397	.009	.229	9.0	229	45
TPCI0619X14	.058	1.5	.186	4.7	.18	4.6	.2	5.08	.002	.051	.055	1.397	.009	.229	14.5	368	73
TPCI0719X04	.067	1.7	.177	4.5	.18	4.6	.2	5.08	.002	.051	.050	1.270	.011	.279	4.6	117	23
TPCI0719X09	.067	1.7	.177	4.5	.18	4.6	.2	5.08	.002	.051	.050	1.270	.011	.279	9.0	229	45
TPCI0719X14	.067	1.7	.177	4.5	.18	4.6	.2	5.08	.002	.051	.050	1.270	.011	.279	14.5	368	73
TPCI0719X04	.067	1.7	.177	4.5	.18	4.6	.2	5.08	.002	.051	.050	1.270	.011	.279	4.6	117	23
TPCI0719X09	.067	1.7	.177	4.5	.18	4.6	.2	5.08	.002	.051	.050	1.270	.011	.279	9.0	229	45
TPCI0719X14	.067	1.7	.177	4.5	.18	4.6	.2	5.08	.002	.051	.050	1.270	.011	.279	14.5	368	73







Directional Force

MOUNTING OPTIONS

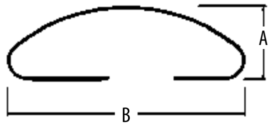
- *Extrusion*

Dome Top Series GASKETS

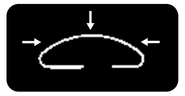
Dome Top Series DT

Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Comp Width		Comp Height		Length		Fingers	Tape
TDT01135X15	.11	2.79	.35	8.9	.170	4.32	.188	4.78	.003	.08	.38	9.65	.055	1.40	15	381	80	.100
TDTS1135X15	.11	2.79	.35	8.9	.170	4.32	.188	4.78	.002	.05	.38	9.65	.055	1.40	15	381	80	.100
TDT02262X15	.22	5.59	.62	15.7	.345	8.76	.375	9.53	.004	.10	.76	19.30	.100	2.54	15	381	60	.100



The Dome Top gaskets have fully independent fingers that are adhesive mounted or rivet track mounted. Their smooth curve provides a large area for electrical contact and smooth wiping action.

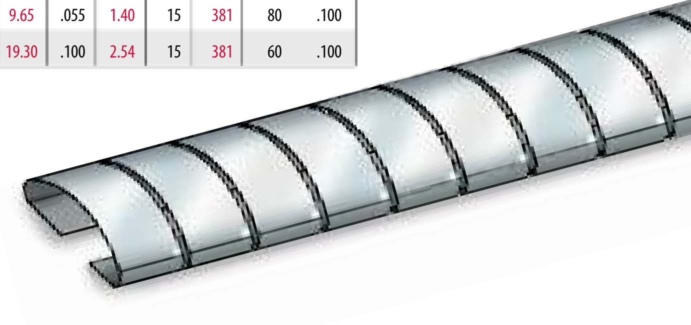


Directional Force

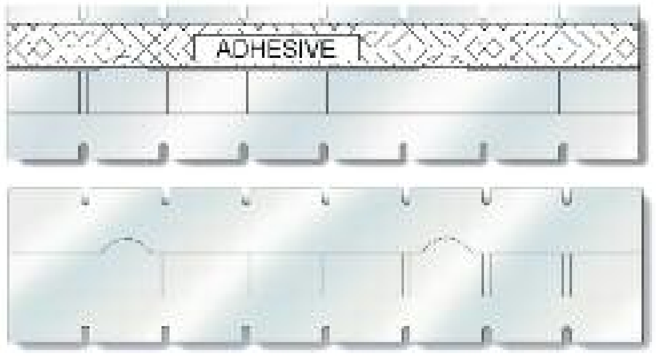
MOUNTING OPTIONS

- *Tape*
- *Riveted*

*When ordering, please state desired mounting option.



Dome Top Series – Application Guide



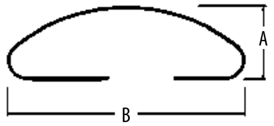
Double-sided Adhesive Mounting

All Dome Top gaskets have a new reduced size index hole for rivet applications. This index hole is almost imperceptible. This feature allows for a robust surface to attach the double-sided adhesive. Therefore one gasket can be produced for both applications. This reduces stock and improves availability.

Dome Top Solid Series DTS

Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Comp Width		Comp Height		Length		Fingers	Tape
TDS01135X15	.11	2.79	.35	8.9	.170	4.32	.188	4.78	.003	.08	.35	8.89	.055	1.40	15	381	80	.100
TDSS1135X15	.11	2.79	.35	8.9	.170	4.32	.188	4.78	.002	.05	.35	8.89	.055	1.40	15	381	80	.100
TDS02262X15	.22	5.59	.62	15.7	.345	8.76	.375	9.53	.004	.10	.76	19.30	.100	2.54	15	381	40	.125



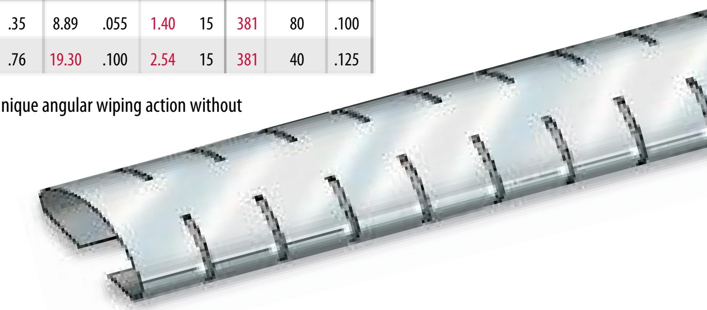
The Dome Top "Solid" Series gaskets have a strip that connects each finger along the top. This allows for unique angular wiping action without snagging. Other features are the same as the Dome Top Series.

Directional Force

MOUNTING OPTIONS

- *Tape*
- *Riveted*

*When ordering, please state desired mounting option.



Other dimensions available upon request, please contact your SEM representative.

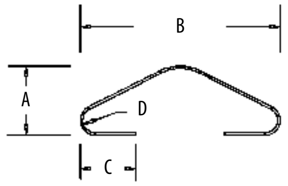
Slot Mount & Adhesive Mount Series
GASKETS

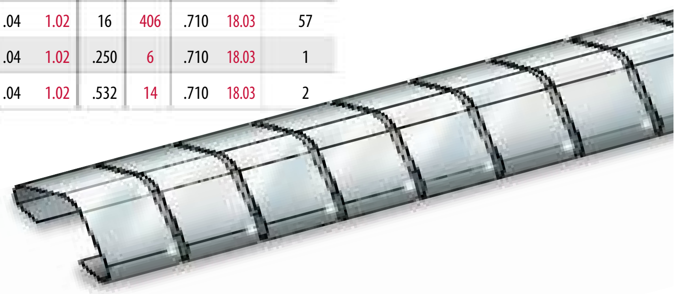
Slot mount gaskets are a standard in the electronic enclosure industry. These gaskets are used in shorter lengths as ESD (electro-static discharge) contacts and in longer lengths for EMI gaskets, which clip into slots or slide onto mounted tracks.

Slot Mount Series RH

Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Mat. Thick		C		D		Length		Comp Width		Fingers
TRH01132X16	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.003	.076	.09	2.29	.02	.508	16.0	406	.390	9.91	86
TRH01132X01	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.003	.076	.09	2.29	.02	.508	.169	4	.390	9.91	1
TRH01132X03	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.003	.076	.09	2.29	.02	.508	.356	9	.390	9.91	2
TRH01132X05	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.003	.076	.09	2.29	.02	.508	.543	14	.390	9.91	3
TRH01132X07	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.003	.076	.09	2.29	.02	.508	.730	19	.390	9.91	4
TRHS1132X16	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.002	.051	.09	2.29	.02	.508	16	406	.390	9.91	86
TRHS1132X01	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.002	.051	.09	2.29	.02	.508	.169	4	.390	9.91	1
TRHS1132X03	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.002	.051	.09	2.29	.02	.508	.356	9	.390	9.91	2
TRHS1132X05	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.002	.051	.09	2.29	.02	.508	.543	14	.390	9.91	3
TRHS1132X07	.11	2.8	.32	8.1	.17	4.3	.188	4.8	.002	.051	.09	2.29	.02	.508	.730	19	.390	9.91	4
TRH02260X16	.22	5.6	.60	15.2	.25	6.4	.281	7.1	.005	.127	.14	3.56	.04	1.02	16	406	.710	18.03	57
TRH02260X02	.22	5.6	.60	15.2	.25	6.4	.281	7.1	.005	.127	.14	3.56	.04	1.02	.250	6	.710	18.03	1
TRH02260X05	.22	5.6	.60	15.2	.25	6.4	.281	7.1	.005	.127	.14	3.56	.04	1.02	.532	14	.710	18.03	2
TRHS2260X16	.22	5.6	.60	15.2	.25	6.4	.281	7.1	.003	.076	.14	3.56	.04	1.02	16	406	.710	18.03	57
TRHS2260X02	.22	5.6	.60	15.2	.25	6.4	.281	7.1	.003	.076	.14	3.56	.04	1.02	.250	6	.710	18.03	1
TRHS2260X05	.22	5.6	.60	15.2	.25	6.4	.281	7.1	.003	.076	.14	3.56	.04	1.02	.532	14	.710	18.03	2





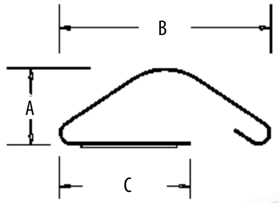
Directional Force

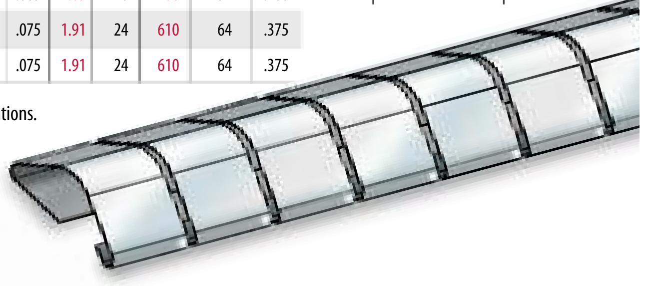
MOUNTING OPTIONS
- *Slot*

Adhesive Mount Series AH

Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Mat. Thick		C		Comp Width		Comp Height		Length		Fingers	Tape
TAH01132X16	.11	2.8	.32	8.1	.170	4.3	.188	4.8	.003	.076	.20	5.1	.390	9.91	.040	1.02	16	406	86	.145
TAHS1132X16	.11	2.8	.32	8.1	.170	4.3	.188	4.8	.002	.051	.20	5.1	.390	9.91	.040	1.02	16	406	86	.145
TAH01337X16	.13	3.3	.37	9.4	.225	5.7	.250	6.4	.003	.076	.21	5.3	.510	12.95	.045	1.14	16	610	96	.145
TAHS1337X16	.13	3.3	.37	9.4	.225	5.7	.250	6.4	.002	.051	.21	5.3	.510	12.95	.045	1.14	16	406	64	.145
TAH02260X16	.22	5.6	.60	15.2	.343	8.71	.375	9.53	.005	.127	.28	7.1	.730	18.54	.055	1.40	16	406	57	.200
TAHS2260X16	.22	5.6	.60	15.2	.343	8.71	.375	9.53	.003	.076	.28	7.1	.730	18.54	.065	1.65	16	406	57	.200
TAH03278X24	.32	8.1	.78	19.8	.335	8.5	.375	9.5	.005	.127	.45	11.4	.980	24.89	.075	1.91	24	610	64	.375
TAHS3278X24	.32	8.1	.78	19.8	.335	8.5	.375	9.5	.003	.076	.45	11.4	.980	24.89	.075	1.91	24	610	64	.375





The AH series gaskets are adhesive mounted general-purpose gaskets used in both compression and wiping applications. Sizes range from .11" (2.8mm) to .32" (8.1 mm) in height. Applications include electronic enclosures, shielded cabinets, and MRI chamber doors.

Directional Force

MOUNTING OPTIONS
- *Tape*

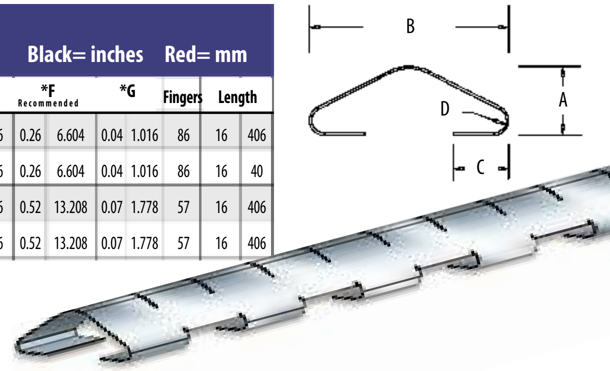
Slot Mount & Low Profile Series
GASKETS

Slot mount gaskets are a standard in the electronic enclosure industry. These gaskets are used in shorter lengths as ESD contacts and longer lengths as EMI gaskets, which clip into slots or slide onto mounted tracks.

Alternate Finger Slot Mount

Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		C		D		*E		*F Recommended		*G		Fingers	Length	
TAF01132X16	0.11	2.80	0.32	8.10	0.169	4.30	0.187	4.75	0.004	0.102	0.085	2.159	0.020	0.508	0.09	2.286	0.26	6.604	0.04	1.016	86	16	406
TAFS1132X16	0.11	2.80	0.32	8.10	0.169	4.30	0.187	4.75	0.002	0.050	0.085	2.159	0.020	0.508	0.09	2.286	0.26	6.604	0.04	1.016	86	16	40
TAF02260X16	0.22	5.59	0.60	15.24	0.250	6.35	0.282	7.16	0.005	0.127	0.130	3.302	0.040	1.016	0.14	3.556	0.52	13.208	0.07	1.778	57	16	406
TAFS2260X16	0.22	5.59	0.60	15.24	0.250	6.35	0.282	7.16	0.003	0.080	0.130	3.302	0.040	1.016	0.14	3.556	0.52	13.208	0.07	1.778	57	16	406



Directional Force

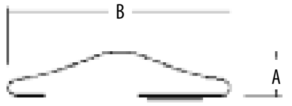
MOUNTING OPTIONS
- *Slot*

* May vary depending on application

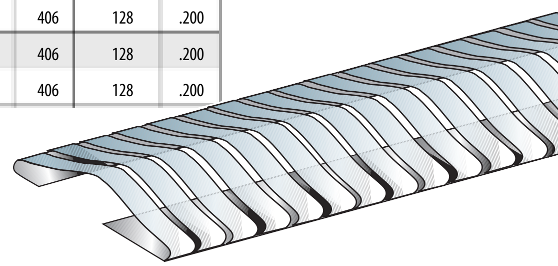
Low Profile Adhesive Mount

Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Length		Fingers	Tape
TAHLP0845X16	0.08	2.0	0.45	11.4	0.10	2.5	0.125	3.18	0.004	.100	16	406	128	.200
TAHLPS845X16	0.08	2.0	0.45	11.4	0.10	2.5	0.125	3.18	0.003	0.08	16	406	128	.200
TAHLP0126X16	0.12	3.0	0.60	15.2	0.10	2.5	0.125	3.18	0.004	.100	16	406	128	.200
TAHLPS126X16	0.12	3.0	0.60	15.2	0.10	2.5	0.125	3.18	0.003	0.08	16	406	128	.200



The low profile series gaskets incorporate design features that allow for some of the lowest compression forces in the industry, while achieving high performance shielding effectiveness. These gaskets are ideally suited for small aperture applications.



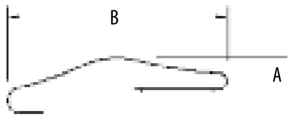
Directional Force

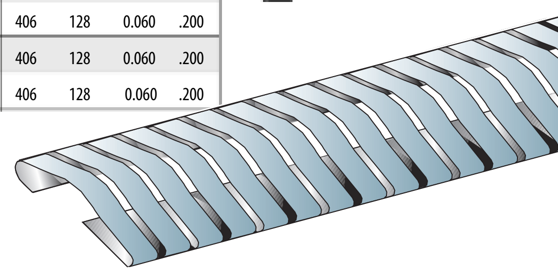
MOUNTING OPTIONS
- *Tape*

Low Profile Clip

Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Length		Fingers	Clip ID	Tape
TCLP0845X16	0.08	2.0	0.45	11.4	0.10	2.5	0.125	3.18	0.004	.100	16	406	128	0.060	.200
TCLPS845X16	0.08	2.0	0.45	11.4	0.10	2.5	0.125	3.18	0.003	0.08	16	406	128	0.060	.200
TCLP0126X16	0.12	3.0	0.60	15.2	0.10	2.5	0.125	3.18	0.004	.100	16	406	128	0.060	.200
TCLPS126X16	0.12	3.0	0.60	15.2	0.10	2.5	0.125	3.18	0.003	0.08	16	406	128	0.060	.200





Directional Force

MOUNTING OPTIONS
- *Clip*
- *Tape*

SCHLEGEL
electronic materials

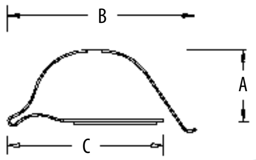
Other dimensions available upon request, please contact your SEM representative.

Folded Series
GASKETS

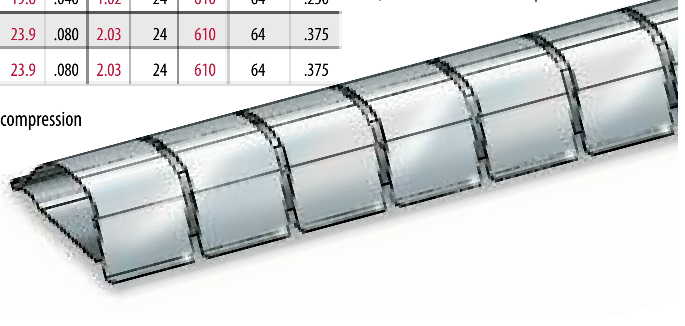
Folded Series FS

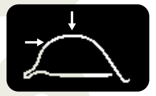
Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		C		Ext Length		Ext Height		Length		Fingers	Tape
TFS01128X16	.11	2.79	.28	7.11	.170	4.32	.188	4.78	.003	.08	.23	5.84	.37	9.4	.065	1.65	16	406	85	.145
TFSS1128X16	.11	2.79	.28	7.11	.170	4.32	.188	4.78	.002	.05	.23	5.84	.37	9.4	.065	1.65	16	406	85	.145
TFS01437X16	.14	3.56	.36	9.14	.228	5.79	.250	6.35	.003	.08	.31	7.87	.50	12.7	.070	1.78	16	406	64	.200
TFSS1437X16	.14	3.56	.36	9.14	.228	5.79	.250	6.35	.002	.05	.31	7.87	.50	12.7	.070	1.78	16	406	64	.200
TFS02360X24	.23	5.84	.60	15.2	.343	8.71	.375	9.53	.004	.10	.50	12.7	.77	19.6	.040	1.02	24	610	64	.250
TFSS2360X24	.23	5.84	.60	15.2	.343	8.71	.375	9.53	.003	.08	.50	12.7	.77	19.6	.040	1.02	24	610	64	.250
TFS02578X24	.25	6.35	.78	19.8	.335	8.51	.375	9.53	.005	.13	.53	13.5	.94	23.9	.080	2.03	24	610	64	.375
TFSS2578X24	.25	6.35	.78	19.8	.335	8.51	.375	9.53	.003	.08	.53	13.5	.94	23.9	.080	2.03	24	610	64	.375



The SEM FS gaskets are industry standard general-purpose gaskets that allow a large range of deflection and compression forces. These gaskets are available without tape for alternate attachment methods.





Directional Force

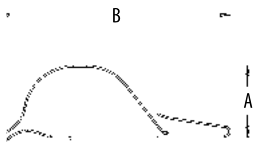
MOUNTING OPTIONS

- Tape

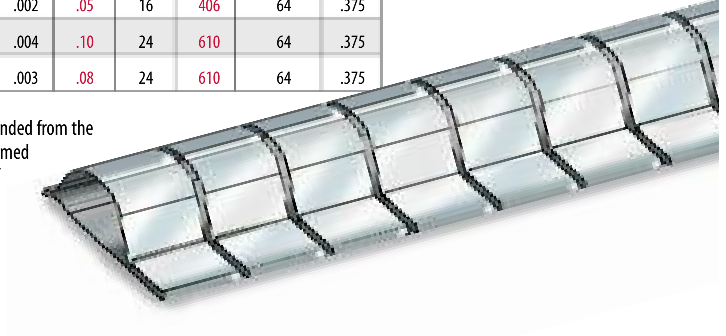
Folded Series FSC

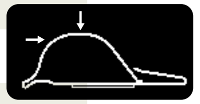
Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Length		Fingers	Tape
TFSC1137X16	.11	2.79	.375	9.5	.170	4.3	.188	4.8	.003	.08	16	406	85	.250
TFSZ1137X16	.11	2.79	.375	9.5	.170	4.3	.188	4.8	.002	.05	16	406	85	.250
TFSC1451X16	.14	3.56	.510	13.0	.228	5.8	.250	6.4	.003	.08	16	406	64	.375
TFSZ1451X16	.14	3.56	.510	13.0	.228	5.8	.250	6.4	.002	.05	16	406	64	.375
TFSC2376X24	.23	5.84	.760	19.3	.343	8.7	.375	9.5	.004	.10	24	610	64	.375
TFSZ2376X24	.23	5.84	.760	19.3	.343	8.7	.375	9.5	.003	.08	24	610	64	.375



The FSC was created to provide snag free gaskets with FS gasket features. The base of the gasket is extended from the mounting area and then folded up, over, down, and then comes to rest over the leading edge of the formed spring. Under compression, the leading edge of the gasket slides under and is "captured." This "no snag" feature is also used to prevent possible gasket damage.





Directional Force

MOUNTING OPTIONS

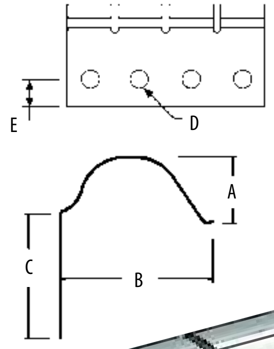
- Tape

Z= Soft Gasket

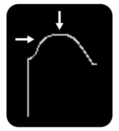
Folded Series FSV

Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Comp Width		Comp Height		C		D		E		Length		Fingers	Tape
TFSV1128X16	.11	2.8	.28	7.1	.170	4.3	.188	4.8	.003	.076	.37	9.4	.065	1.65	.24	6.1	.80	20.3	.06	1.52	16	406	82	.200
TFS21128X16	.11	2.8	.28	7.1	.170	4.3	.188	4.8	.002	.051	.37	9.4	.065	1.65	.24	6.1	.80	20.3	.06	1.52	16	406	85	.200
TFSV1437X16	.14	3.6	.37	9.4	.228	5.8	.250	6.4	.003	.076	.50	12.7	.070	1.78	.32	8.1	.09	2.3	.06	1.52	16	406	64	.250
TFS31437X16	.14	3.6	.37	9.4	.228	5.8	.250	6.4	.002	.051	.50	12.7	.070	1.78	.32	8.1	.09	2.3	.06	1.52	16	406	64	.250
TFS52360X24	.23	5.8	.60	15.2	.343	8.7	.375	9.5	.004	.097	.77	19.6	.040	1.02	.50	12.7	.31	7.9	.08	2.03	24	610	64	.375
TFSS2360X24	.23	5.8	.60	15.2	.343	8.7	.375	9.5	.002	.051	.77	19.6	.040	1.02	.50	12.7	.31	7.9	.08	2.03	24	610	64	.375
TFS52578X24	.25	6.4	.78	19.8	.335	8.5	.375	9.5	.005	.127	.94	23.9	.080	2.03	.48	12.2	.38	9.7	.14	3.56	24	610	64	.375
TFSS2578X24	.25	6.4	.78	19.8	.335	8.5	.375	9.5	.003	.076	.94	23.9	.080	2.03	.48	12.2	.38	9.7	.14	3.56	24	610	64	.375



The FSV is an FS gasket that has the base bent at a right angle to the curve of the spring form, with all the other features of the FS gasket maintained.



Directional Force

MOUNTING OPTIONS

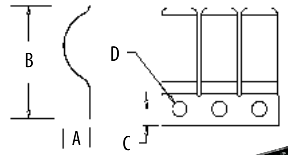
- Tape
- Rivet
- Weld
- Solder

*When ordering, please state desired mounting option.

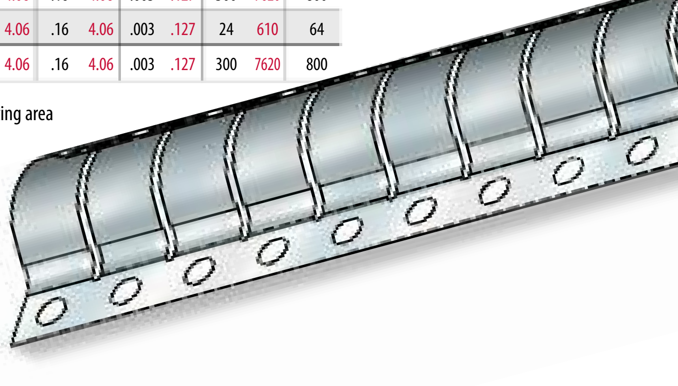
Folded Series FSD

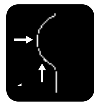
Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Comp Width		Comp Height		C		D		Mat Thick		Length		Fingers
TFSD2599X24	.25	6.4	1.09	27.7	.335	8.5	.375	9.5	1.27	32.26	.08	2.03	.16	4.06	.16	4.06	.005	.127	24	610	64
TFSD2599XAA	.25	6.4	1.09	27.7	.335	8.5	.375	9.5	1.27	32.26	.08	2.03	.16	4.06	.16	4.06	.005	.127	300	7620	800
TFSS2599X24	.25	6.4	1.09	27.7	.335	8.5	.375	9.5	1.27	32.26	.08	2.03	.16	4.06	.16	4.06	.003	.127	24	610	64
TFSS2599X30	.25	6.4	1.09	27.7	.335	8.5	.375	9.5	1.27	32.26	.08	2.03	.16	4.06	.16	4.06	.003	.127	300	7620	800



The FSD is an FS gasket with its base lying on the same plane as the curve in the spring form, with the mounting area shortened. This mounting is often modified for custom applications.





Directional Force

MOUNTING OPTIONS

- Tape
- Rivet
- Weld
- Solder

*When ordering, please state desired mounting option.

SCHLEGEL electronic materials

Other dimensions available upon request, please contact your SEM representative.

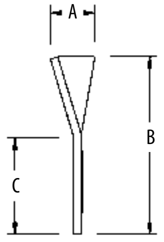
Twist Series
GASKETS

The Twist Series gaskets are designed for demanding compression applications. These will compress to a height of .010 in. and provide excellent shielding performance. Profiles include standard flat, right angle, double twist and clip-on.

Twist Series T

Black= inches Red= mm

SEM P/N	A		B		C		Finger		Pitch		Mat. Thick		Length		Fingers	Tape
TT0N0320X24	.03	.762	.20	5.1	.14	3.56	.08	2.03	.095	2.41	.003	.076	24	610	253	
TT000320X24	.03	.762	.20	5.1	.14	3.56	.08	2.03	.095	2.41	.003	.076	24	610	253	.100
TT0N0323X24	.03	.762	.23	5.8	.14	3.56	.08	2.03	.095	2.41	.003	.076	24	610	253	
TT000323X24	.03	.762	.23	5.8	.14	3.56	.08	2.03	.095	2.41	.003	.076	24	610	253	.100
TT0N0630X24	.07	1.78	.30	7.6	.15	3.81	.15	3.81	.165	4.19	.003	..076	24	610	145	
TT000630X24	.07	1.78	.30	7.6	.15	3.81	.15	3.81	.165	4.19	.003	.076	24	610	145	.100
TT0NS630X24	.07	1.78	.30	7.6	.15	3.81	.15	3.81	.165	4.19	.002	.051	24	610	145	
TT00S630X24	.07	1.78	.30	7.6	.15	3.81	.15	3.81	.165	4.19	.002	.051	24	610	145	.100
TT0N0634X24	.07	1.78	.34	8.6	.19	4.83	.15	3.81	.165	4.19	.003	.076	24	610	145	
TT000634X24	.07	1.78	.34	8.6	.19	4.83	.15	3.81	.165	4.19	.003	.076	24	610	145	.145
TT0NS634X24	.07	1.78	.34	8.6	.19	4.83	.15	3.81	.165	4.19	.002	.051	24	610	145	
TT00S634X24	.07	1.78	.34	8.6	.19	4.83	.15	3.81	.165	4.19	.002	.051	24	610	145	.145
TT0N0647X16	.07	1.78	.47	11.9	.31	7.87	.15	3.81	.165	4.19	.003	.076	24	610	145	
TT000647X16	.07	1.78	.47	11.9	.31	7.87	.15	3.81	.165	4.19	.003	.076	24	610	145	.250



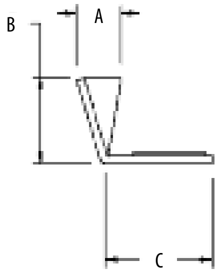
Directional Force

MOUNTING OPTIONS
- *Tape*

Twist Series TV

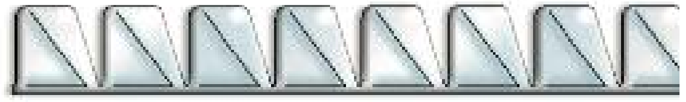
Black= inches Red= mm

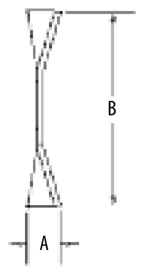
SEM P/N	A		B		C		Finger		Pitch		Mat. Thick		Length		Fingers	Tape
TTVN0323X24	.03	.762	.08	2.03	.16	4.06	.08	2.03	.095	2.41	.003	.008	24	610	253	
TTV00323X24	.03	.762	.08	2.03	.16	4.06	.08	2.03	.095	2.41	.003	.008	24	610	253	.100
TTV03323X24	.03	.762	.08	2.03	.30	4.06	.08	2.03	.095	2.41	.003	.008	24	610	253	.250
TTVN0634X24	.07	1.78	.14	3.56	.20	5.08	.15	3.81	.165	4.19	.003	.008	24	610	145	
TTV00634X24	.07	1.78	.14	3.56	.20	5.08	.15	3.81	.165	4.19	.003	.008	24	610	145	.145



Directional Force

MOUNTING OPTIONS
- *Tape*





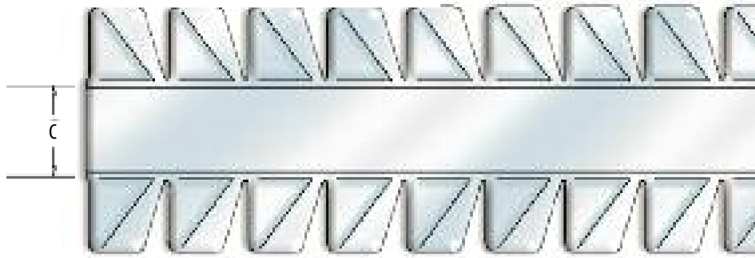
Twist Series T2

Black= inches Red= mm

SEM P/N	A		B		C		Finger		Pitch		Mat. Thick		Length		Fingers	Tape
TT200650X24	.07	1.78	.50	12.7	19	4.83	.15	.381	.165	.419	.003	.008	24	610	145	.145

Directional Force

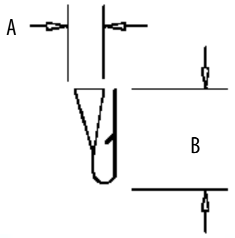
MOUNTING OPTIONS
- *Tape*



Twist Series UT

Black= inches Red= mm

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Length		Fingers	Clip ID		Lance
TUT70323X16	.03	.762	.15	3.8	.08	2.03	.095	2.41	.003	.008	16	406	168	.07	1.78	
TUT7D323X16	.03	.762	.08	2.0	.08	2.03	.095	2.41	.003	.008	24	610	253	.07	1.78	D
TUT70634X16	.07	1.78	.22	5.6	.15	3.81	.165	4.19	.003	.008	24	610	145	.07	1.78	
TUT7D634X16	.07	1.78	.22	5.6	.15	3.81	.165	4.19	.003	.008	24	610	145	.07	1.78	D



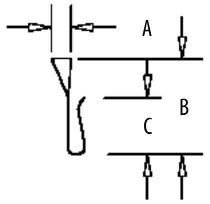
Directional Force

MOUNTING OPTIONS
- *Clip*

Twist Series UZ

Black= inches Red= mm

SEM P/N	A		B		C		Finger		Pitch		Mat. Thick		Length		Fingers	Clip ID		Lance
TUZ70634X16	.07	1.78	.38	9.7	.22	5.59	.15	3.81	.165	4.19	.003	.008	24	610	145	.07	1.78	
TUZ80634X16	.07	1.78	.38	9.5	.22	5.59	.15	3.81	.165	4.19	.003	.008	24	610	145	.07	1.78	D
TUZ50634X16	.07	1.78	.38	9.5	.22	5.59	.15	3.81	.165	4.19	.003	.008	24	610	145	.05	1.27	
TUZ5D634X16	.07	1.78	.38	9.5	.22	5.59	.15	3.81	.165	4.19	.003	.008	24	610	145	.05	1.27	D



Directional Force

MOUNTING OPTIONS
- *Clip*

Other dimensions available upon request, please contact your SEM representative.

Clip-On Series GASKETS

The Clip-On gaskets are used in enclosures, shielded cabinets and on circuit cards for ESD contacts and EMI gaskets. When edge mounting these gaskets, close attention must be given to clip size, lance requirements, deflection parameters and finger configuration. SEM provides application assistance in the development of specifications.

Clip-On Series C

Black= inches Red= mm Comp = Compressed

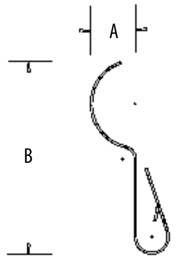
SEM P/N	A		B		Finger		Pitch		Mat. Thick		Comp Width		Comp Height		Lance Start		Lance Pitch		Length		Fingers	Clip ID	Lance
TC041030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.56	14.22	1.125	28.58	16	406	86	.045	
TC051030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.2	1	25.4	16	406	86	.050	
TC061030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.2	1	25.4	16	406	86	.065	
TC071030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.2	1	25.4	16	406	86	.070	
TCD41030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.2	1	25.4	16	406	86	.045	D
TCD51030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.25	1	25.4	16	406	86	.050	D
TCD61030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.25	1	25.4	16	406	86	.065	D
TCD71030X16	.10	2.5	.30	7.6	.14	3.6	.187	4.75	.005	.13	.33	8.38	.050	1.27	.364	9.25	1	25.4	16	406	86	.070	D
TC041145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.2	1	25.4	16	406	86	.045	
TC051145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.25	1	25.4	16	406	86	.050	
TC061145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.25	1	25.4	16	406	86	.065	
TC071145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.25	1	25.4	16	406	86	.070	
TCD41145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.2	1	25.4	16	406	86	.045	D
TCD51145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.25	1	25.4	16	406	86	.050	D
TCD61145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.25	1	25.4	16	406	86	.065	D
TCD71145X16	.11	2.79	.45	11.4	.14	3.6	.187	4.75	.005	.13	.47	11.94	.055	1.40	.364	9.25	1	25.4	16	406	86	.070	D
TC072599X16	.25	6.4	1.09	27.7	.335	8.51	.375	9.53	.005	.13	1.27	32.26	.080	2.03	1.938	49.2	1.125	28.58	16	406	43	.070	D

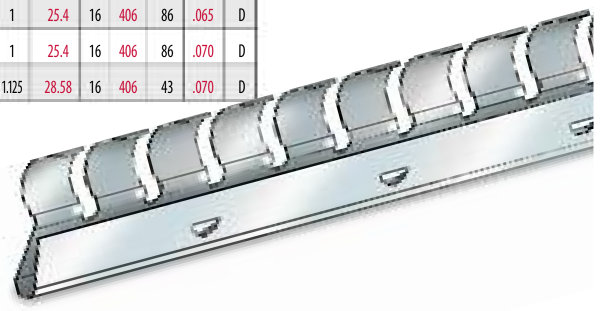
Directional Force

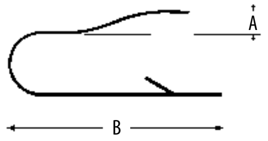
MOUNTING OPTIONS

- *Clip*

TC"D"= D-Lance Clip
TC"0"= Plain Clip







Mini-Clip Series C

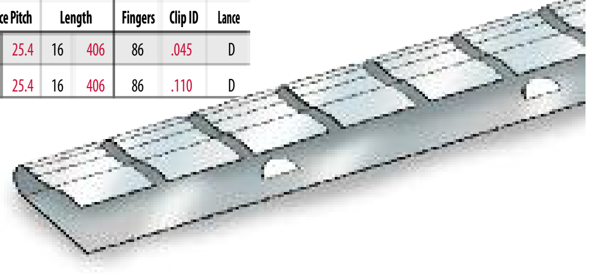
Black= inches Red= mm Comp = Compressed

SEM P/N	A		B		Finger		Pitch		Mat. Thick		Comp Width		Comp Height		Lance Start		Lance Pitch		Length		Fingers	Clip ID	Lance
TCD40721X16	.07	1.8	.25	6.4	.14	3.6	.200	7.87	.003	.08	.22	5.59	.015	.38	.485	12.3	1	25.4	16	406	86	.045	D
TCD10721X16	.07	1.8	.25	6.4	.14	3.6	.200	7.87	.003	.08	.22	5.59	.015	.38	.485	12.3	1	25.4	16	406	86	.110	D

Directional Force

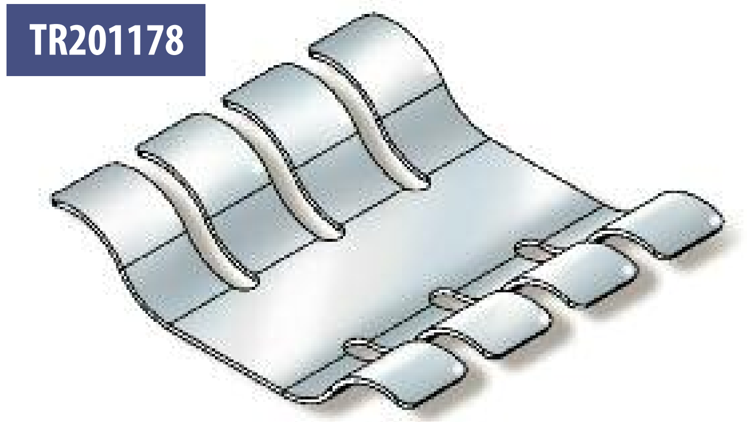
MOUNTING OPTIONS

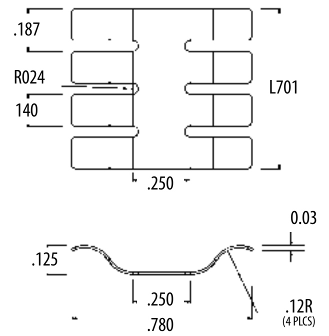
- *Clip*



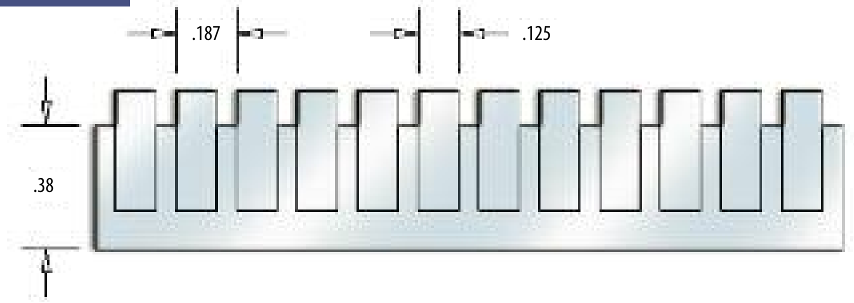
Contact Series GASKETS

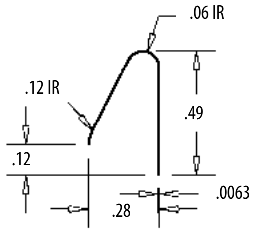
TR201178



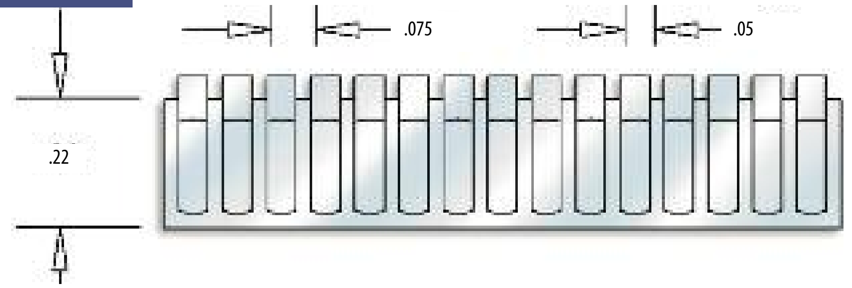


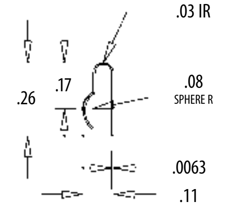
TU002849



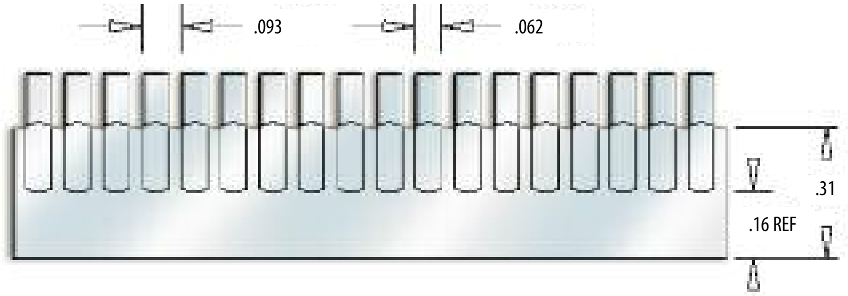


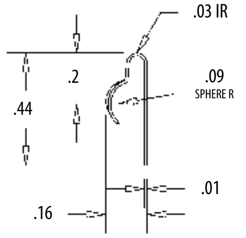
TUD01026





TUD01644X16

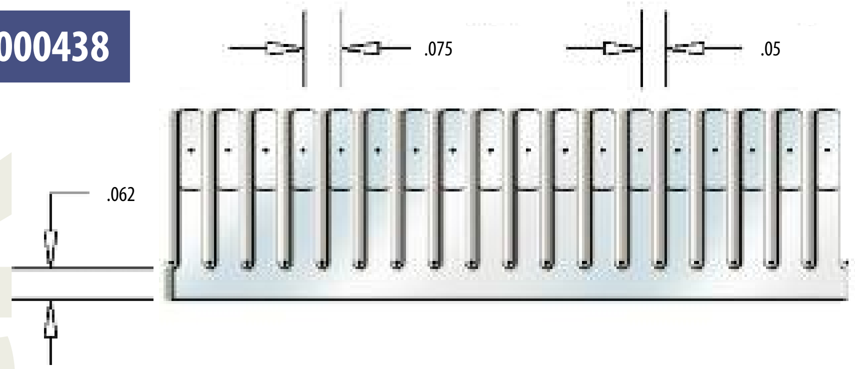


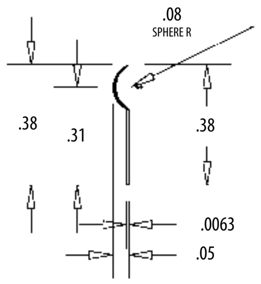


Other dimensions available upon request, please contact your SEM representative.

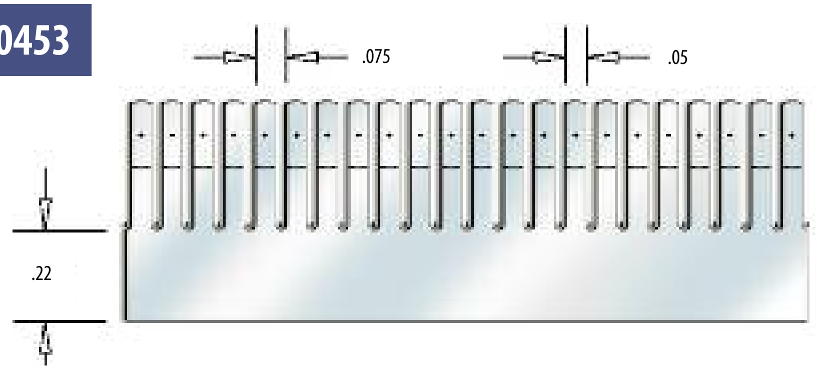
Fingerstock

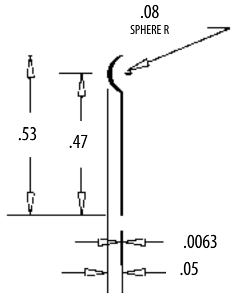
TD000438



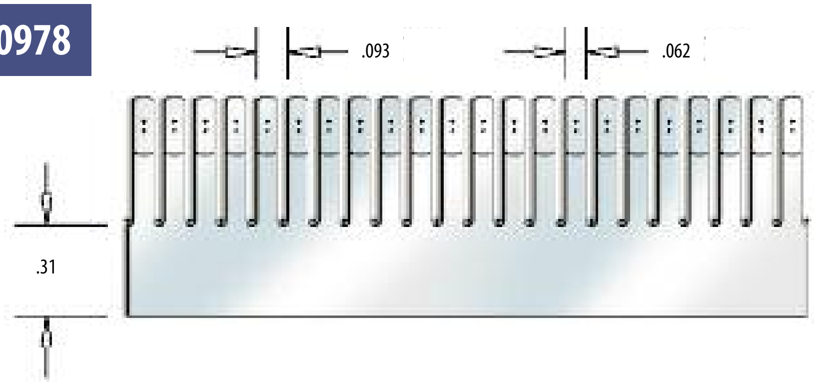


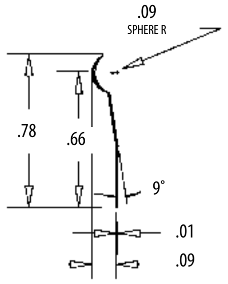
TD000453



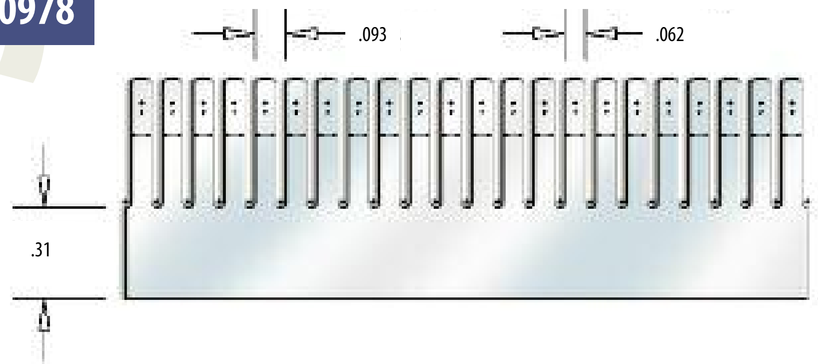


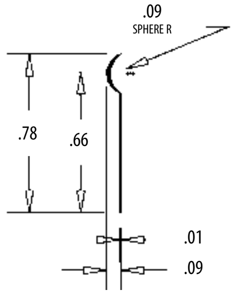
TD000978



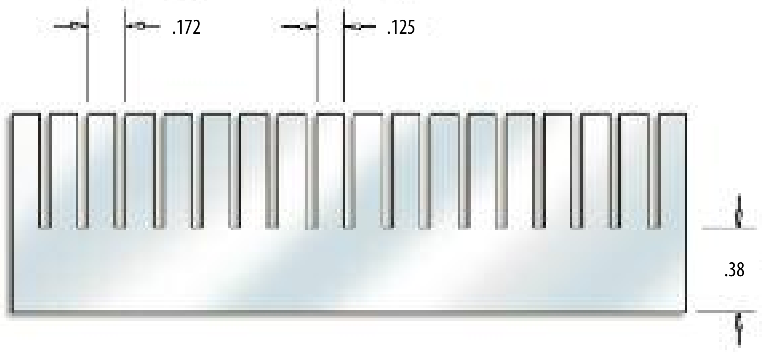


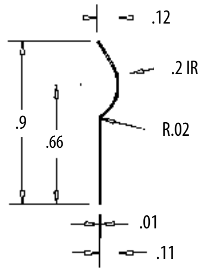
TDA00978



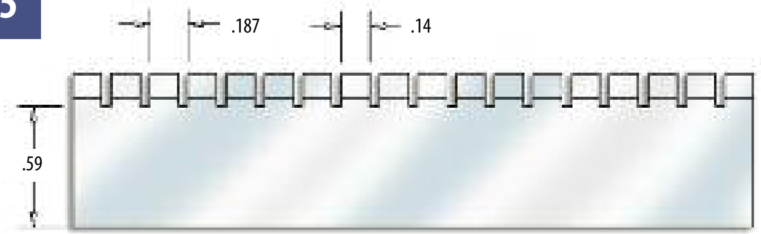


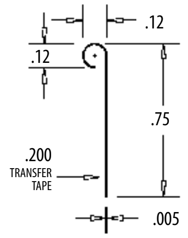
TS001190

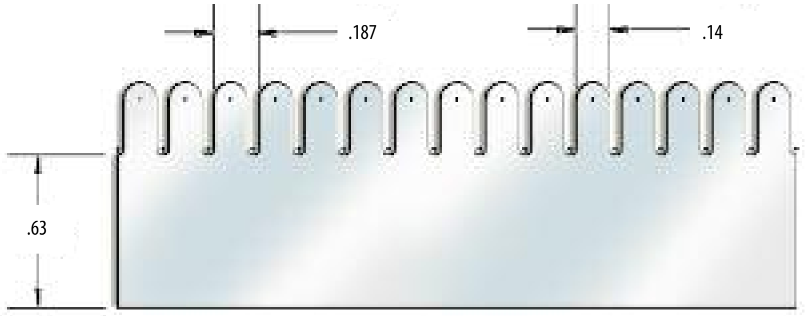




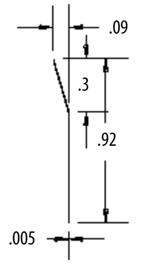
TRS01275



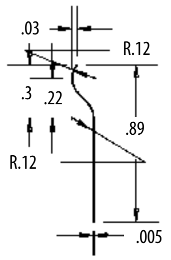




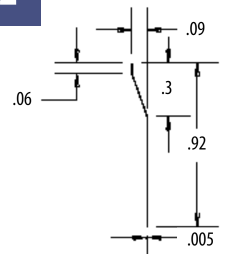
TRB00892



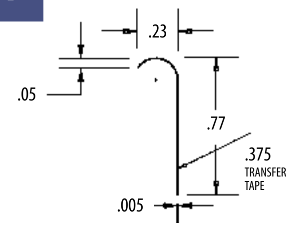
TRA01189



TRC00892



TRR02277



Other dimensions available upon request, please contact your SEM representative.

Ordering Information

When placing an order or requesting a quotation, please give part number, your required finish I.D. from the chart below, and required length.

Part Number Example:

Stock Item	Finish I.D.	Length
TRH01132	**T**	**16**

- The above example is the "Slot Mount Series" gasket shown on page 6. The height is .11 inch and the width is .32 inch. An "-S-" indicates a soft gasket. (TRHS1132T16)
- The "T" indicates a bright tin finish. See adjacent list of available finishes.
- This part is available in standard lengths of 16 inches. Please consult factory for custom lengths.

Required Finish	I.D.
Bright Finish	B
Bright Tin	T
Bright Nickel	N
Zinc/Chromate Clear	Z
Zinc/Chromate Yellow	Y
Cadmium Chromate	C
Silver	A
Gold	G
Stainless Steel	S

Standard plating finish is .0002 +/- .0001" (gold .00005" min.)
Gold plating must be specified prior to quote.
Other finishes available upon request.
Stainless Steel: 300 Series (301 Alloy and 302 Alloy).

Adhesive Mounting of EMI Gaskets

SEM tape mounted BeCu gaskets offer pressure-sensitive, double-sided adhesive for strong bonding to a wide variety of surface conditions. Ideal for all-purpose contact strips used in metal cabinets and electronic enclosures and is unaffected by temperatures from -67 to +250°F (-55 to 121°C)

Simply follow these four easy steps:

1. Remove all grease and oily residue with a solvent such as isopropyl alcohol/water mixture (rubbing alcohol) or heptane. Dry and smooth the mounting surface with emery cloth if necessary.
2. Peel off the protective paper backing from the 3M adhesive tape.
3. Place the gasket in correct position. Press firmly to ensure a good bond to surface. Avoid repositioning, which might impair the effectiveness of the adhesive or may bend or kink the strip. NOTE: On strips where fingers cover the solid portion of the gasket, pressure may be applied by inserting a mandrel in the strip and pressing down.
4. At room temperature approximately 50% of the ultimate strength will be achieved after 20 minutes, 90% after 24 hours, and 100% after 72 hours. In some cases bond strength can be increased and ultimate bond strength can be achieved more quickly by exposure of the bond to elevated temperature, e.g., 150°F (66°C) for 1 hour.

The SEM family of 3M taped shielding gaskets is solvent, moisture and temperature tolerant, and performs well in shear/wipe and compression applications of all kinds. The 3M adhesive meets a number of specs including Mil Standard. For further information please consult the factory.

Galvanic Potential Differences

SEM beryllium copper gaskets are non-porous, non-hygroscopic, and have a smooth surface. Properly applied, wiping gaskets are inherently self-cleaning and resist oxidation given the absence of moisture. Compression-only gaskets usually have high-pressure contacts, which bind the two surfaces and resists oxidation. However, given enough time, temperature and other environmental effects, all of the metals used will corrode.

In the presence of oxygen, metals oxidize. Other atmospheric effects and thermal cycling accelerates this process. When moisture is present, these oxidized salts form electrolytes between the two dissimilar metals and become a simple battery. As currents flow from the cathode to the anode, voltage potentials develop. The voltage amplitude is directly proportional to currents flowing across the junction of the two metals. These currents accelerate corrosion of the metals.

Using Mil-STD 1250, the galvanic potential should not exceed .25 volts. This specification is critical for salt spray or other harsh environments. In commercial applications, many engineers allow up to .5 volts in controlled environments. To reduce the effects of galvanic conditions, we suggest using the following chart to select the correct metals and plating surfaces.

	Anode										
Cathode	**Magnesium**	**Zinc**	**Aluminum**	**Cadmium**	**Tin**	**Iron, Steel**	**Chromium**	**Brass**	**Copper, Bronze**	**Nickel, Monel**	**Stainless Steel**
Zinc	.075										
Aluminum	1.05	.029									
Cadmium	1.05	.029	0.01								
Tin	1.36	.060	0.31	0.31							
Iron, Steel	1.30	.029	0.32	0.32	0.01						
Chromium	1.39	0.65	0.34	0.34	0.03	0.02					
Brass	1.54	0.78	0.500	0.50	0.22	0.20	0.02				
Copper, Bronze	1.58	0.82	0.55	0.55	0.24	0.23	0.11	0.02			
Nickel, Monel	1.58	0.82	0.56	0.56	0.25	0.25	0.12	0.03	0.01		
Stainless Steel	1.67	0.91	0.64	0.64	0.35	0.32	0.20	0.11	0.02	0.08	
Silver	1.78	1.02	0.75	0.75	0.44	0.43	0.31	0.22	0.21	0.19	0.11

1. For units which will be subjected to salt spray or salt water, metal should be chosen where the potential difference is less than 0.25V.
2. Where it is possible the unit will be subjected to high humidity that is not salt laden, then the potential difference should not exceed 0.45V.

Compression-Load-Deflection (CLD) Performance and EMI Shielding Effectiveness

CLD performance expressed in lbs./linear ft. and typical EMI shielding effectiveness data for select configurations are presented below; Deflection: 25% of dynamic range; Shielding Effectiveness: Plane Wave.

SEM Part No.	Deflection In Inches	Compression Load (lbs./linear ft.)	Shielding Effectiveness 25% Deflection
TUD01026	0.10	8	100dB @ 100MHz
TUD01644	.023	28	105dB @ 100MHz
TT000634	.013	8	85dB @ 100MHz
TT000650	.013	13	110dB @ 100MHz
TGH01032	.015	46	108dB @ 100MHz
TGH01037	.020	52	108dB @ 100MHz
TGH02060	.043	28	108dB @ 100MHz
TGH02378	.050	32	108dB @ 100MHz
TGH01132	.015	5	108dB @ 100MHz
TAH02060	.040	13	108dB @ 100MHz
TAH03278	.062	24	108dB @ 100MHz
TRCL1145	.015	8	100dB @ 100MHz
TCL25109	.025	8	112dB @ 100MHz
TR201178	.015	26	100dB @ 100MHz
TU002849	.018	2	85dB @ 100MHz
TDS25109	.050	13	112dB @ 100MHz
TV502360	.032	17	108dB @ 100MHz
TV502578	.050	13	108dB @ 100MHz
TRH02262	.040	13	108dB @ 100MHz
TFS02360	.045	17	108dB @ 100MHz
TFS02376	.038	17	108dB @ 100MHz

The data presented is based on testing and to our knowledge is accurate and true. Since applications, test methods, and test procedures may vary, we recommend that users of our products perform their own test to assure the suitability of these products for their specific applications. We offer no product warranty, either expressed or implied, except that any product proven defective will be replaced. Freedom from present or future patent infringement cannot be guaranteed, nor can the suitability of our products for specific applications.