RoHS
RoHS指令 10物質適合

EMI Shielding

Gasket Products Catalog

CONDUCTIVE GASKETS
CONDUCTIVE TAPES
EMI PRODUCTS

ZIPPERTUBING(JAPAN), LTD.

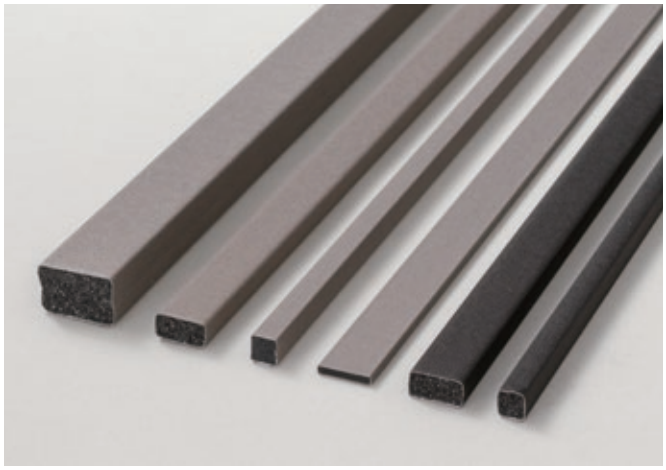
Conductive Gasket Products Catalog

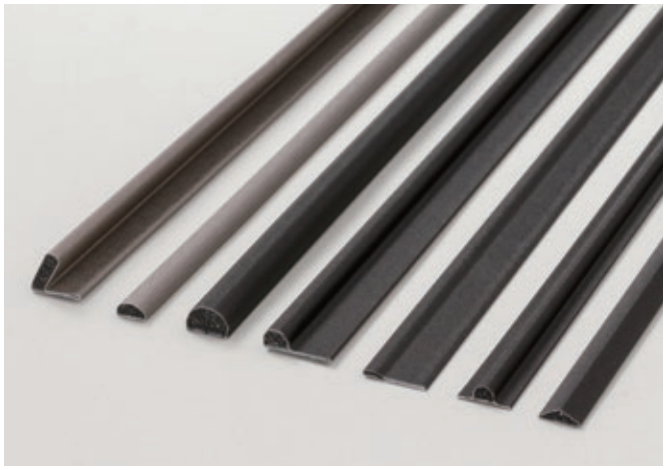
Shield Foam®

Shield Foam® is a registered trademark of ZIPPERTUBING(JAPAN), Ltd.

RoHS

- A wide range of sizes, each customizable to meet your needs.
- Excellent workability makes Shield Foam ideal for a wide range of FG applications.
- Shield Foam 20TS, 22TS, 30TS, and 32TS are UL94 V-0 certified.

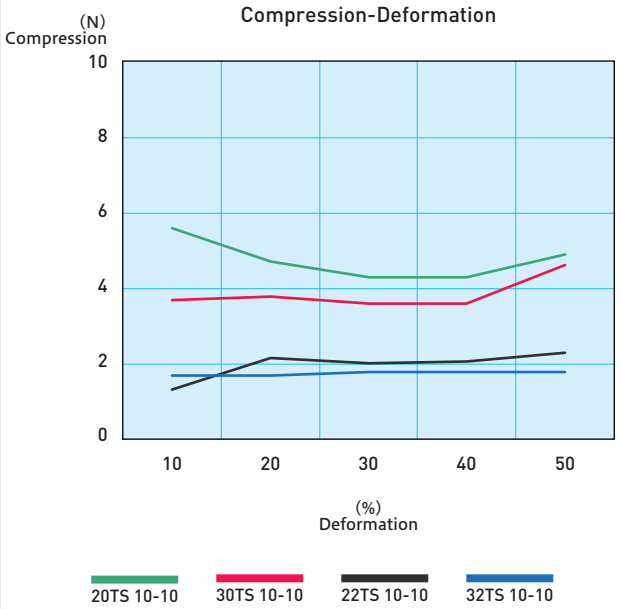




Part No.		20TS	22TS	30TS	32TS
Color		Black		Gray	
Material	Conductive fabric	Polyester Cloth / Cu+Ni plated / Special Coating			
	Core material	Polyurethane Foam			
Surface resistivity		≦0.1Ω／□		≦0.05Ω／□	
Compressive strain		○	◎	○	◎
Compression set		○	○	◎	◎
Corossion resistance		○	○	○	○
Wear resistance		○	◎	○	○
Fray resistance		◎	◎	○	○
Adhesive tape		Conductive Acrylic Adhesive / Acrylic Adhesive			
Standard length		1m			
Note			Halogen free based on IEC61249-21		Halogen free based on IEC61249-21
		UL94 V-0 *Without adhesive type			

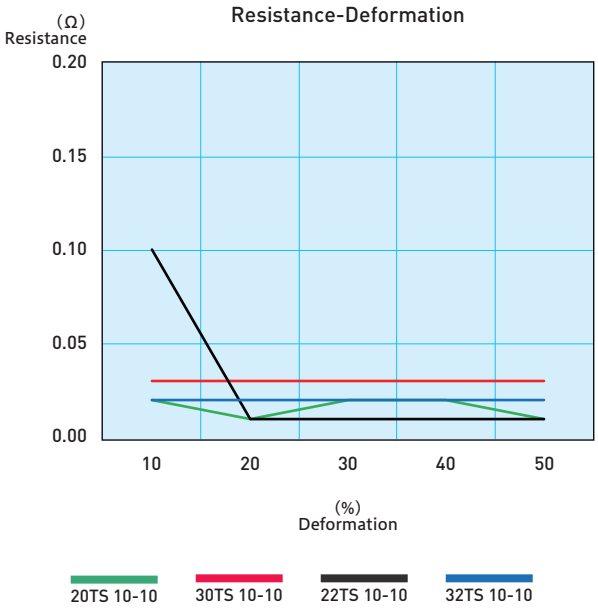
Physical Property Tests

(1) Compression - Deformation



*The values on the graph above are measured values, and are not guaranteed.

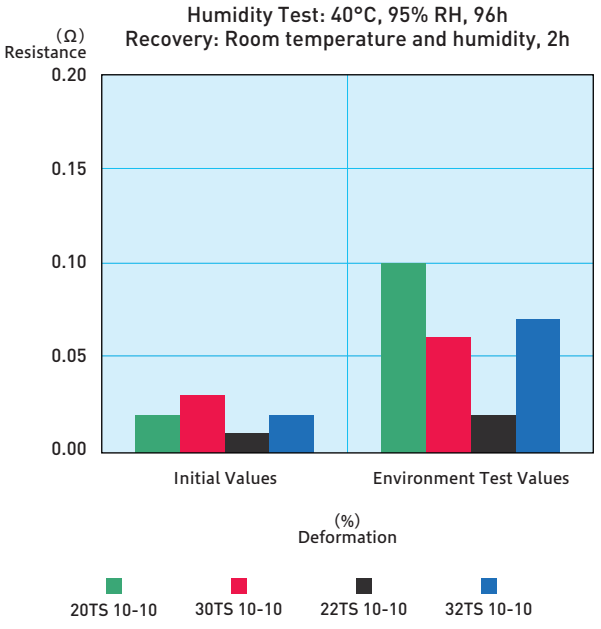
(2) Resistance - Deformation



*The values on the graph above are measured values, and are not guaranteed.

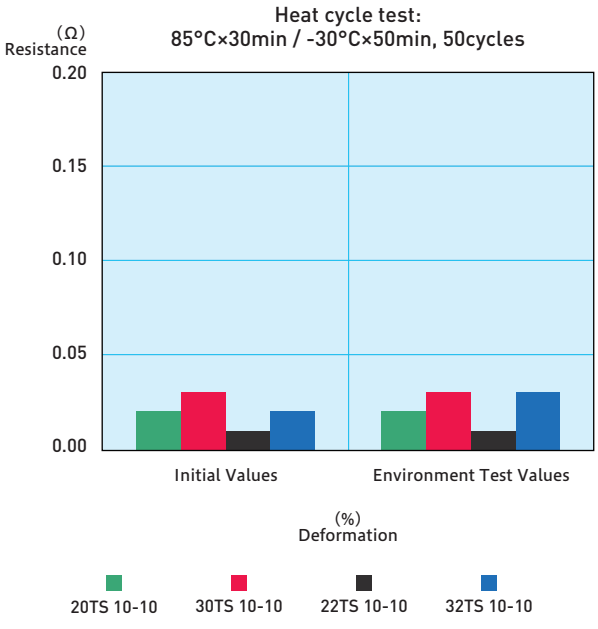
Environmental Tests

(3-1) Resistance before and after humidity test



*The values on the graph above are measured values, and are not guaranteed.

(3-2) Resistance before and after heat cycle test



*The values on the graph above are measured values, and are not guaranteed.

Part Number Structure

① Part No. ␣ ② Absence of adhesive ③ Width — ④ Thickness (⑤ Adhesive type ⑥ Adhesive position ⑦ Tape width) ⑧ Cutting method ⑨ Length

① Part No.

Part No.	20TS	22TS	30TS	32TS
With urethane foam core *Other than height 0.5mm	20TS	22TS	30TS	32TS
Non-foam type *Height 0.5mm only	20TF	22TF	65TFV	32TF

② Absence of adhesive

With adhesive tape	Blank
Without adhesive tape	(NT)

③ Width

Width	2mm or more, at 0.5mm interval

④ Thickness

Thickness	0.5mm or more, at 0.5mm interval

*Except for 0.7mm

⑤ Adhesive type

Non-conductive tape	N/A
Conductive tape	(AZD)

⑥ Adhesive position

Type	Standard position	Applied on the height side instead of the width side	Applied on corner position	Applied on the height side instead of the width side including the corner position	Without adhesive tape
Adhesive position					
Notation	N/A	(R)	(S)	(RS)	(NT)
Example Part No.	32TS 10-5	32TS 10-5 (R)	32TS 10-5 (S)	32TS 10-5 (RS)	32TS (NT)10-5

⑧ Cutting method / ⑨ Length

Cut	L=＊＊＊ *1＊＊＊mm	Kiss cut	H L=＊＊＊ *2＊＊＊mm

*1 Up to 1,000mm
*2 Up to 250mm

Example 32TS 10-1 L=150
32TS 10-1 H L=150

⑩ Other specifications

For specifications not listed, please contact us.

Case	Example Part No.	Description
Standard type	32TS 10-5 L=150	32TS W:10mm H:5mm Non-conductive tape L:150mm
Without adhesive tape	32TS (NT)10-5 L=150	32TS W:10mm H:5mm Without adhesive tape L:150mm
Conductive tape type	32TS 10-5(AZD) L=150	32TS W:10mm H:5mm Conductive tape L:150mm
Corner tape type	32TS 10-5(S) L=150	32TS W:10mm H:5mm Non-conductive tape, corner position L:150mm
Kiss cut type	32TS 10-5 H L=150	32TS W:10mm H:5mm Non-conductive tape L:150mm Kiss cut

List of Standard Square Shield Foam Sizes

Thickness (mm) \ Width (mm)	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10	10.5	11	12	13	14	15	16	17	17.5	18	19	20	21	22
0.5	●	●	●	●	●		●	●	●	●	●	●		●	●	●	●	●	●	●		●	●	●		●
0.7	●	●	●		●	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●	●	●		
1	●	●	●	●	●		●	●	●	●	●	●		●		●	●	●	●	●		●	●	●	●	●
1.5	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●	●	●	●	●
2	●		●		●	●	●	●	●	●	●	●		●	●	●	●	●	●	●		●	●	●	●	
2.5			●		●		●	●		●	●	●											●	●		
3		●	●	●	●		●	●	●	●	●	●		●	●	●		●			●	●	●	●		●
3.5			●		●		●	●		●	●	●			●	●		●			●		●		●	
4			●		●		●	●	●	●	●	●			●	●		●				●		●	●	
4.5											●	●														
5			●		●		●	●	●	●	●	●			●	●		●						●	●	
5.5							●	●			●	●			●	●		●						●		
6					●		●	●	●	●	●	●			●	●								●		
6.5							●	●	●	●	●	●				●								●		
7					●		●	●	●	●	●	●		●		●		●						●		
7.5							●					●														
8							●	●		●	●	●	●		●	●		●						●		
8.5												●														
9							●			●	●	●				●										
9.5											●	●				●										
10							●		●	●	●	●			●	●		●		●		●		●	●	
10.5										●		●				●		●				●		●		
11										●						●								●		
11.5															●											
12												●			●	●								●		
13											●	●				●				●		●	●			
14												●												●		
15												●				●		●	●			●		●		
16																										
17												●				●		●		●				●		
18												●				●								●		
19																			●							
20												●	●			●	●	●				●		●		
Non-conductive tape	1	1.5	1.5	1.5	2	2.5	2.5	3	3	4	4	5	5	5	6	6	6	6	6	8	8	9	9	9	9	9
Conductive tape	1	1.5	2	2.5	3	3.5	4	5	6	7	8	9	9.5	10	11	12	13	14	15	16	16.5	17	18	19	20	21

*Unit：mm
*Other sizes can be made. Please ask about size of your needs.

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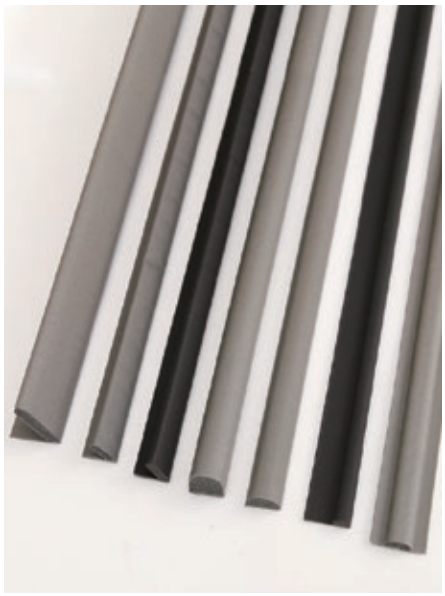
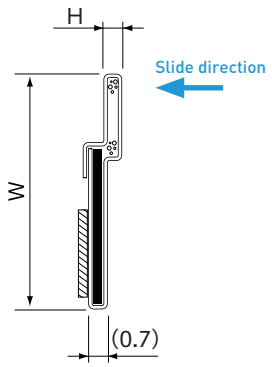
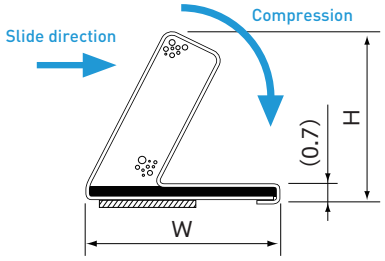


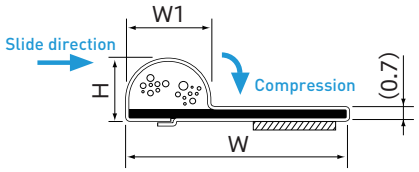
Shape	N-Shape	
Example Part No.	22TA N12-1 32TA N12-1	
Example Size	W	H
	12	1



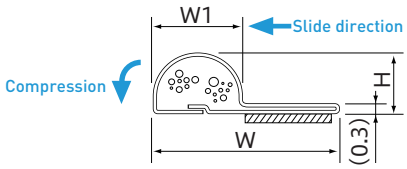
Shape	Angle-fold	
Example Part No.	22TA L10-9 32TA L10-9	
Example Size	W	H
	10	9



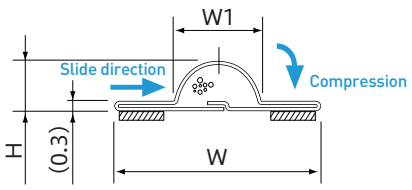
Shape	P-Shape (with support)		
Example Part No.	22TA P13-4 32TA P13-4		
Example Size	W	W1	H
	13	5	4



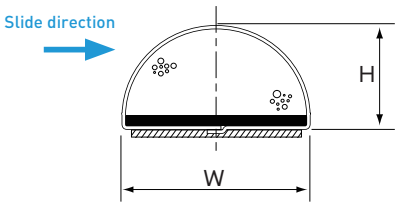
Shape	P-Shape (without support)		
Example Part No.	22TS 7-3P 32TS 7-3P		
Example Size	W	W1	H
	6.8	4	3



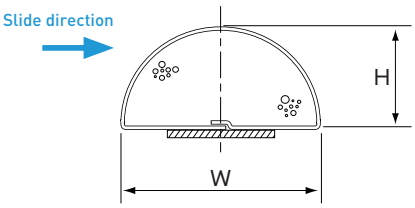
Shape	Z01Type		
Example Part No.	22TS Z01-03 32TS Z01-03		
Example Size	W	W1	H
	10	4	3



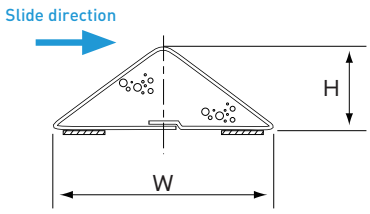
Shape	D-Shape (with support)	
Example Part No.	22TA D6-3(AZD) 32TA D6-3(AZD)	
Example Size	W	H
	6	2
	6	3
	6	5
	10	5



Shape	D-Shape (without support)	
Example Part No.	22TS 6-3D 32TS 6-3D	
Example Size	W	H
	6	3
	7	5
	10	5
	10	10



Shape	TR-Shape	
Example Part No.	22TS 8-3TR 32TS 8-3TR	
Example Size	W	H
	8	1.5
	8	3



Shield Foam®

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Shield Foam 44PO

Heat resistance

- 105℃ Heat resistance
- No fraying at cut edges
- Halogen free based on IEC 61249-2-21

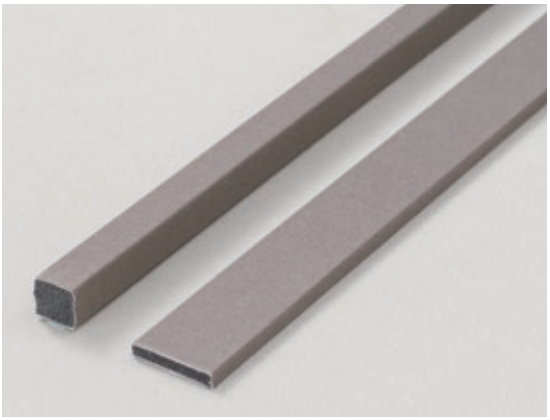
Part No.		44PO
Color		Silver
Material	Conductive Film	Aluminum Foil / PET Film
	Core Material	Polyurethane Foam
Adhesive Tape		Conductive Acrylic Adhesive / Acrylic Adhesive
Width		5～21mm
Thickness		1.3mm, 1.8mm, 2.3mm, 3.3mm, 4.3mm, 5.3mm
Standard Length		500mm

Shield Foam 65POV

Durability

- High-resilience urethane foam gasket

Part No.		65POV
Color		Gray
Material	Conductive Fabric	Polyester Cloth / Cu+Ni plated
	Core Material	Polyurethane Foam
Adhesive Tape		Conductive Acrylic Adhesive / Acrylic Adhesive
(W) Width		3～21mm
(H) Thickness		1.8mm, 2.3mm, 3.3mm, 4.3mm, 5.3mm, 6.3mm, 10.3mm
Standard Length		1m
Note		Halogen-containing type

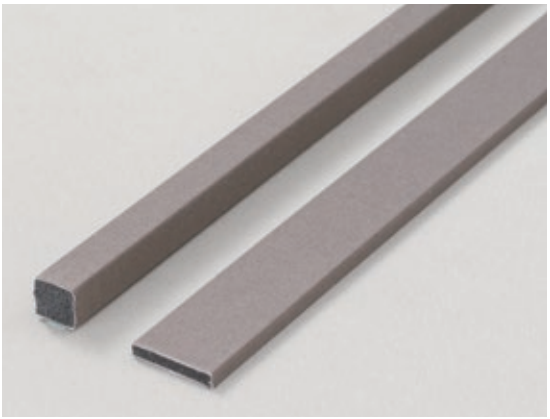


Shield Foam 32PO

Durability

- High-resilience urethane foam gasket

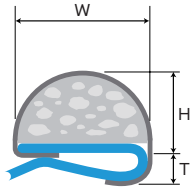
Part No.		32PO
Color		Gray
Material	Conductive Fabric	Polyester Cloth / Cu+Ni plated
	Core Material	Polyurethane Foam
Adhesive Tape		Conductive Acrylic Adhesive / Acrylic Adhesive
(W) Width		3～21mm
(H) Thickness		1.8mm, 2.3mm, 3.3mm, 4.3mm, 5.3mm, 6.3mm, 10.3mm
Standard Length		1m
Note		Halogen free based on IEC 61249-2-21

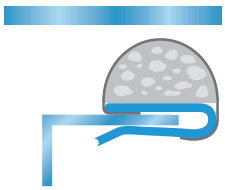


Clip Gasket

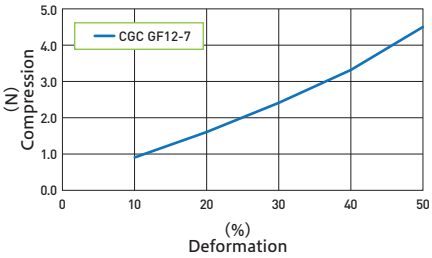
Part No.		CGC GF
Conductive Fabric	Color	Gray
	Material	Polyester Cloth / Cu + Ni plated / Spacial Coating
	Surface Resistivity	≦0.05Ω／□
Core Material		Polyurethane Foam
Clip		ABS Resin
Suitable Board Thickness		0.8mm～1.2mm
Standard Length		2m

Part No.	Size (mm)		
Gray	W	H	T
CGC GF6-1.5	6	1.5	1.5
CGC GF6-3.5	6	3.5	1.5
CGC GF6-4.5	6	4.5	1.5
CGC GF9-4	9	4	3
CGC GF9-5	9	5	3
CGC GF9-7	9	7	3
CGC GF12-7	12	7	2.5
CGC GF12-8.7	12	8.7	2.5

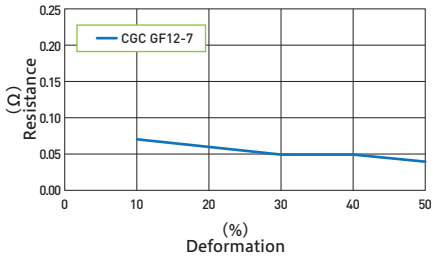




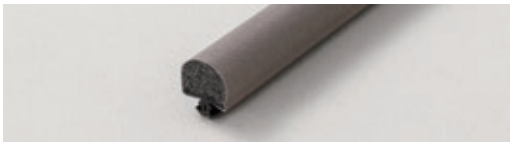
Compression-Deformation



Resistance-Deformation

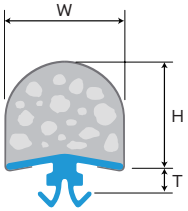


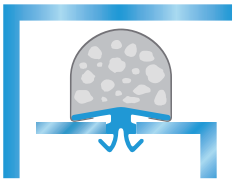
Dart Gasket



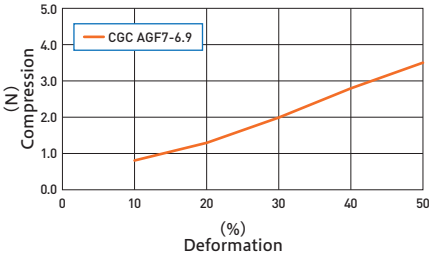
Part No.		CGC AGF
Conductive Fabric	Color	Gray
	Material	Polyester Cloth / Cu + Ni plated / Spacial Coating
	Surface Resistivity	≦0.05Ω／□
Core Material		Polyurethane Foam
Clip		ABS Resin
Suitable Board Thickness		0.8mm～1.0mm
Standard Length		1m

Part No.	Size (mm)		
Gray	W	H	T
CGC AGF7-2.6	7	2.6	1.2
CGC AGF7-3.1	7	3.1	1.2
CGC AGF7-6.9	7	6.9	1.2

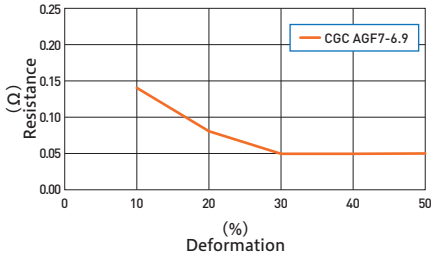




Compression-Deformation

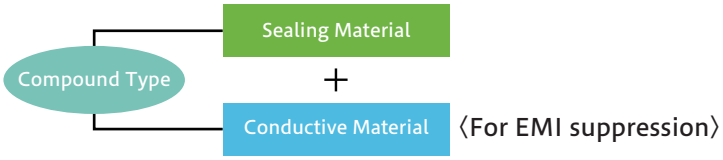


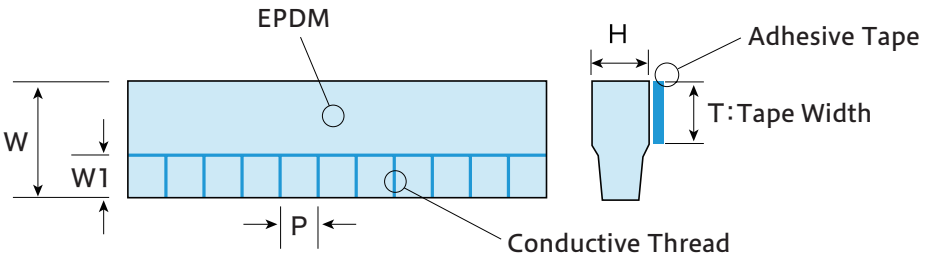
Resistance-Deformation



Soft Seal SEN

- Perfect for dust and EMI Shielding
- Superior chemical, heat, weather resistance
- Adhesive tape backing for easy installation

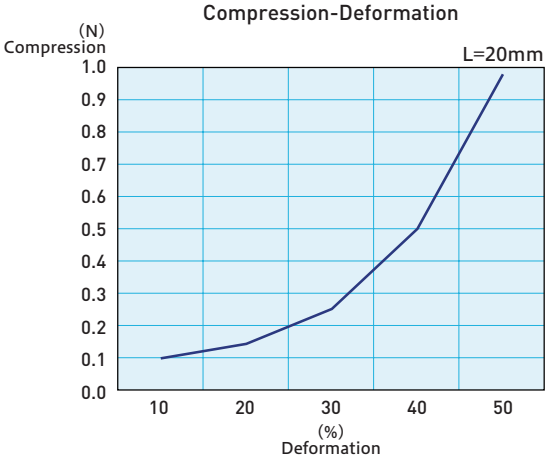




Product Name		Soft Seal SEN
Color		Black
Material	Sealing Material	Foamed EPDM
	Conductive Material	Conductive thread : Nylon Fiber / Cu + Ni plated
	Adhesive Tape	Adhesive Tape : Acrylic Adhesive
Standard Length		100m
Note		Dust resistance / Chemical resistance

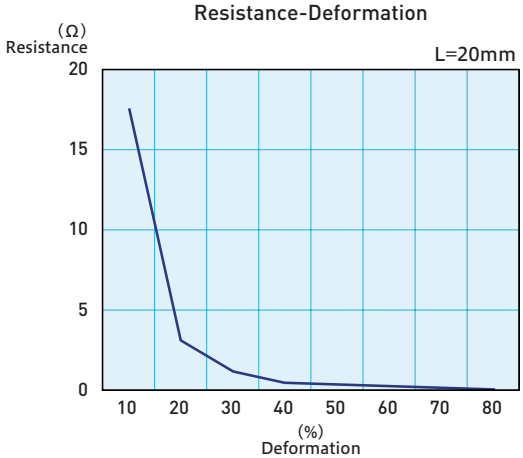
Part No.	W	H	P	T	W1
SEN 5-3-2	5	3	2	2	2
SEN 7-3-3	7	3	3	3	3
SEN 10-3-3	10	3	3	5	3
SEN 12-3-3	12	3	3	6	3

Compression - Deformation



*The values on the graph above are measured values, and are not guaranteed.

Resistance - Deformation



*The values on the graph above are measured values, and are not guaranteed.

Conductive Tape

		Conductive Fabric Tape		Conductive Double-faced Tape
Part No.		DK020FR	DK201FR	DK355W
Color		Gray		—
Base material	Material	Polyester cloth, Cu+Ni plated urethane coating	Modaacrylic fiber cloth (Cu+Ni plated)	Conductive Mesh
	Surface Resistivity	≦0.08Ω／□	≦0.3Ω／□	—
Adhesive Material		Conductive acrylic adhesive		Acrylic Adhesive
Total Thickness		0.155mm±0.025	0.250mm±0.03	0.047mm±0.008
Standard Length		Approx. 50m		
Note				

	Conductive Fabric Tape		Conductive Double-faced Tape
Part No.	DK020FR	DK201FR	DK355W
Top-to-bottom coductivity	○	○	○
Flame resistance	○	○	—
FR grade	UL510FR	UL510FR	—
Halogen free*	○	○	—
Tracking	○	—	◎
Light Transmission	—	—	○
Workability	○	○	—

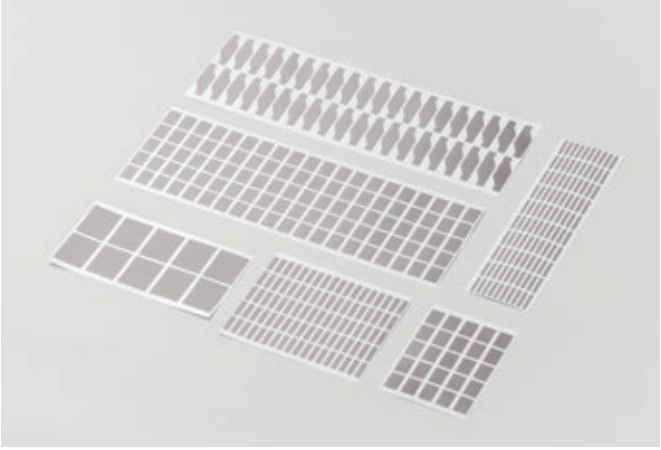
*Halogen free based on IEC 61249-2-21

Custom-shaped cutting

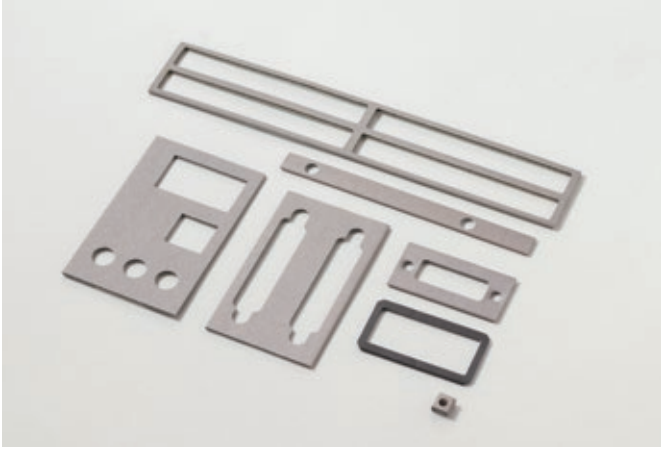
Examples

*For further information, scan the QR code to contact us.

Kiss-cut



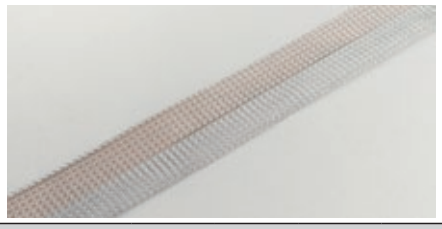
Die-cutting



Mesh

Shield Mesh			
Part No.	Width	Standard Length	Number Length
M-10	10	50m	Single-Yarn Braid
M-17	17		
M-21	21		
M-25	25		
M-30	30		
M-35	35		
M-38	38		
M-55	55	25m	Double-Yarn Braid
M-65	65		
M-85	85		
M-95	95		
M-120	120		
M-140	140		
M-170	170		
M-230	230		
M-340	340		

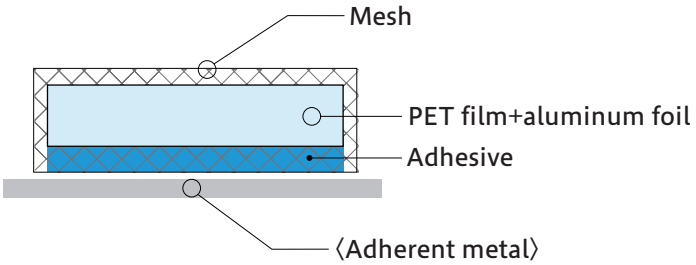
*Material：Super fine tin-plated soft copper (0.12mm)



Shield Mesh with Adhesive Tape				
Part No.	Z10-T4	Z10-T6	Z17-T6	Z25-T12
Width	10mm	10mm	17mm	25mm
Tape Width	4mm	6mm	6mm	12mm
Number Included	1 Braided lengths			
Standard Length	50m			

Adhesive Mesh Tape AL	
Part No.	(AL)
Core	PET film + Al foil
Bare Wire	Tin-plated soft copper wire
Adhesive	Acrylic adhesive
Width	21mm
Standard Length	25m

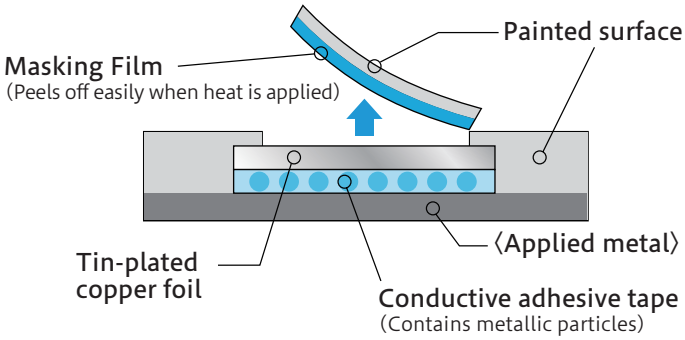
Adhesive Mesh Tape AL



Conductive Masking Tape

- Conductive masking tape with partially masked tin-plated copper foil
- Used to reduce baking/curing time by half for control panels and similar applications
- Masking layer contracts as it dries, allowing easy removal

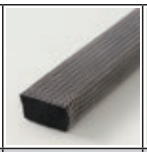
Part No.	LM-044B-LF
Masking Film	Polyester film
Conductive Tape	Tin-plated copper foil
Adhesive	Conductive synthetic resin adhesive
Thickness	0.055mm
Standard Length	50m
Temp. for Baking Finish	150℃～180℃
Note	



Part No.	Width	Masking Film Width
LM-044B-LF-13	13mm	9mm
LM-044B-LF-20	20mm	16mm
LM-044B-LF-25	25mm	21mm

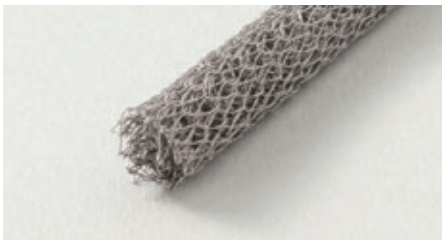
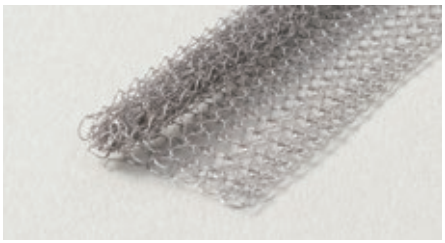
Noise Seal

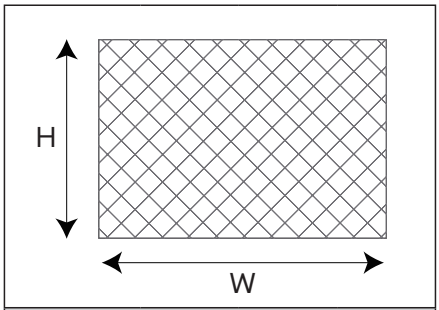
●Noise-blocking, braided ultra-fine Monel wire mesh membrane gasket
●Ensures enclosure contact stability

									
Part No.		46M	47M	48M	27SM	38SM	58FM	59FM	61FM
Type		Standard			Silicone Core		Neoprene Core		
Shape		Square	Round	Tadpole	Round	Tadpole	Tadpole	Square	Round
Core Material	Material	Coreless			Silicone Tube		Neoprene Sponge		
Conductive Layer	Material	Monel Wire							
	Wire Diameter	0.12 mm			0.12 mm		0.12 mm		
Operating Temperature		-40℃～200℃					-25℃～100℃		
Note									

Standard Type

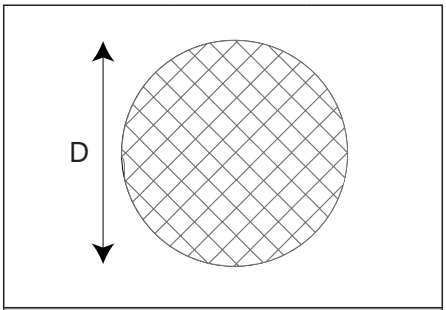
Braided ultra-fine (0.12mm thick) Monel metallic wire mesh that provides superb shielding,corrosion-resistance, and elasticity.



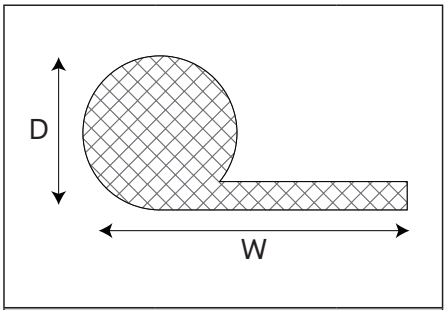
Square

Part No.	W	H	Standard Length
46M 23-23	2.6	2.6	100m
46M 32-15	3.5	1.8	
46M 32-23	3.5	2.6	
46M 32-39	3.5	4.2	
46M 47-15	4.9	1.8	
46M 47-23	4.9	2.6	



Round

Part No.	D	Standard Length
47M 15	1.9	100m
47M 23	2.6	
47M 27	2.7	
47M 32	3.8	
47M 39	4.2	
47M 47	5.0	
47M 63	6.6	50m
47M 92	9.5	



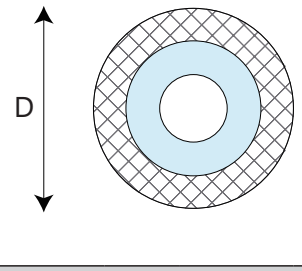
Tadpole

Part No.	D	W	Standard Length
48M 15-158	1.8	16.0	100m
48M 32-126	3.7	12.8	

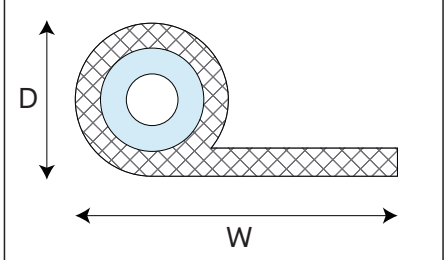
Noise Seal

Silicone Core Type

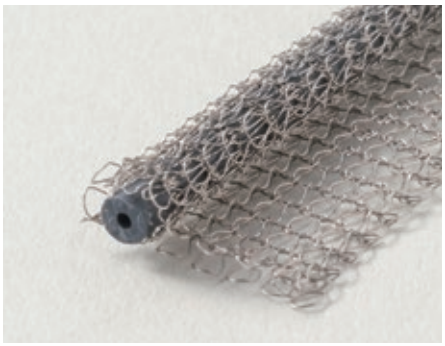
Silicone rubber tube sheathed in braided ultra-fine (0.12mm thick) metallic wire mesh that provides shielding, corrosion-resistance, and elasticity.



Round			
Part No.	D	Mesh Layer	Standard Length
27SM 15	1.8	Single	100m
27SM 23	2.3	Double	
27SM 24	2.4	Single	
27SM 30	3.2	Double	
27SM 32	3.4	Double	
27SM 39	3.9	Single	

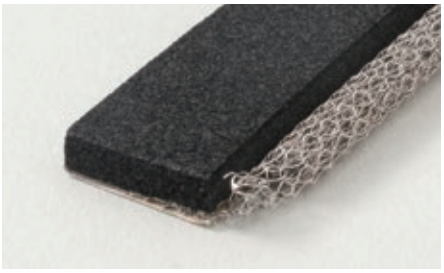


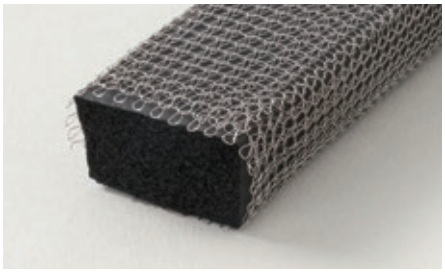
Tadpole			
Part No.	D	W	Standard Length
38SM 32-126	3.5	12.6	100m

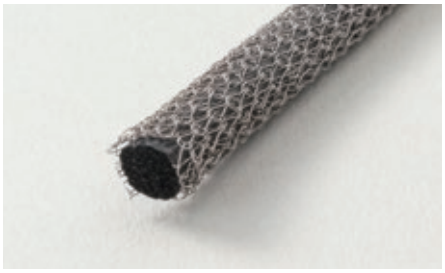


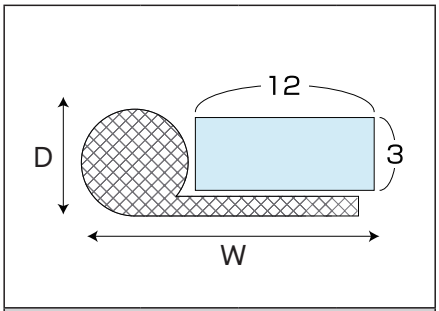
Neoprene Core Type

58FM is 48M combined with neoprene sponge. 59FM and 61FM are neoprene sponge with ultra-fine metallic wire mesh sheathing.

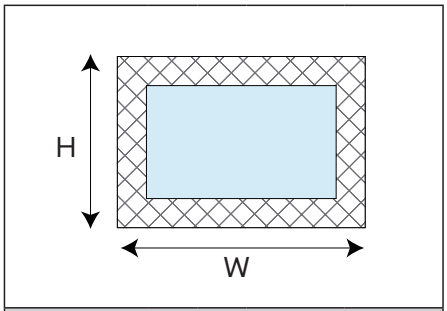




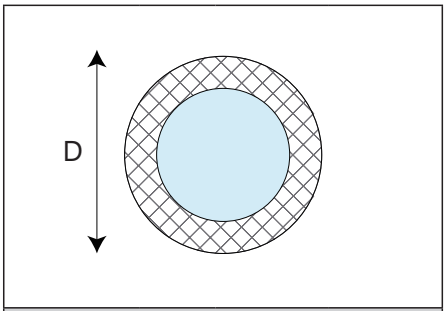




Tadpole			
Part No.	D	W	Standard Length
58FM 3-12	3.5	15.2	50m



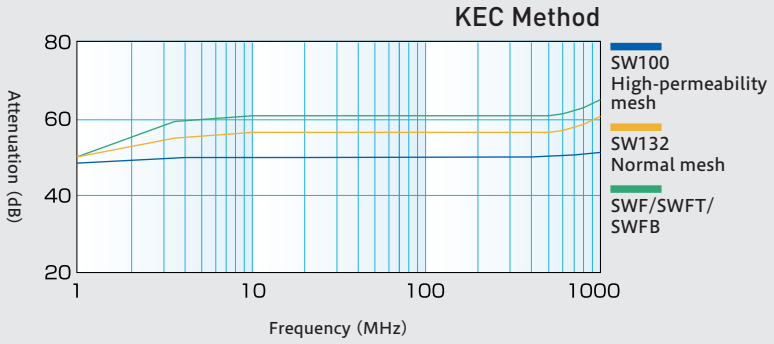
Square				
Part No.	W	H	Mesh Layer	Standard Length
59FM 60-60	6.0	6.0	Single	50m
59FM 60-120	12.0	6.0	Double	
59FM 60-150	15.0	6.0	Double	
59FM 125-200	20.0	12.5	Double	



Round			
Part No.	D	Mesh Layer	Standard Length
61FM 35	3.7	Single	100m
61FM 49	4.9	Double	

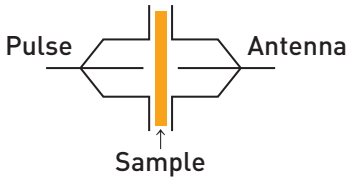
Shield Window Film

Example of Shilding effectiveness (Electric field)



KEC Method

The KEC Method measures attenuation by placing a sample inside a test cell (as illustrated below), generating an electric pulse, transmitting it through the sample, and measuring the resulting signal from various directions.



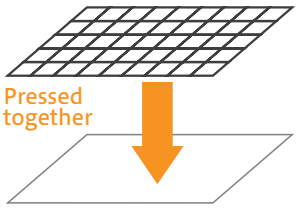
Shielded High-Transmittance Transmittance Window Application

- Excellent transmittance and high shielding performance
- Easy to Die-cut to specific measurements
- Combined processes such as the addition of adhesive backing or back paneling are possible

Product Configuration

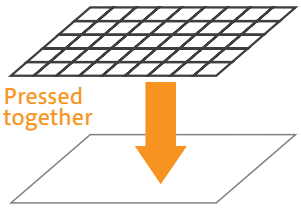
Shield Window Film (SWF)

Conductive Mesh (#132)



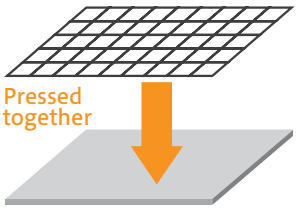
Shield Window Film with adhesive backing applied (SWFT)

Shield Window Film



Shield Window Film with back panel applied (SWFB)

SWFT



Product Specifications

Product Name	Shield Window Film	Shield Window Film with Adhesive	Shield Window Film with Panel
Part No.	SWF 132075(***×***) ***×*** : Size	SWFT 132075(***×***) ***×*** : Size	SWFB 132075 □○○(***×***) □ : Material ○ : Thickness ***×*** : Size
Total Thickness	0.135mm	—	—
Mesh Density	#132	#132	#132
Total Light Transmittance	> 60 %	—	—
Panel Material	—	—	Polycarbonate Acrylic
Panel Thickness	—	—	10:1mm 20:2 mm 30:3 mm
Product Size	Max. Width*: 910 mm	Max. Width*: 450 mm	Max. Width*: 450 mm

*Please inquire separately about maximum width of Shield Window Film.

Shield Window

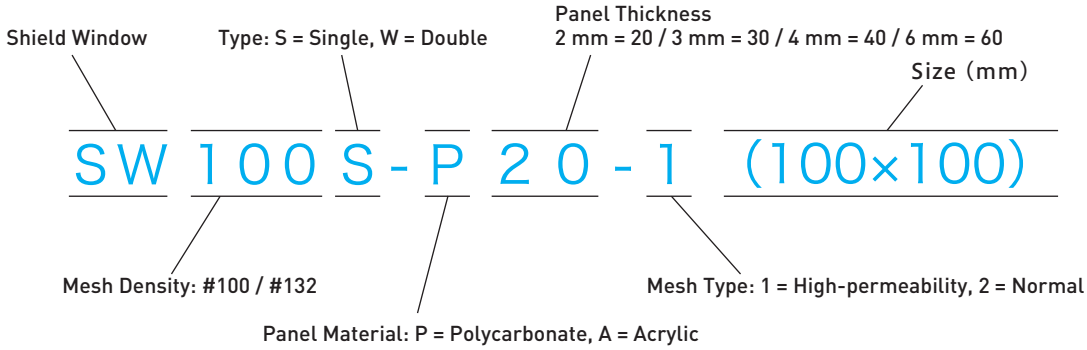
- Integral molding of various clear resin panels and special conductive mesh
- Perfect for shielding openings which require permeability, such as windows, doors, and displays
- Highly-permeable mesh types are also available.
- Flame-resistant grade polycarbonate penel is used.

Product Specifications

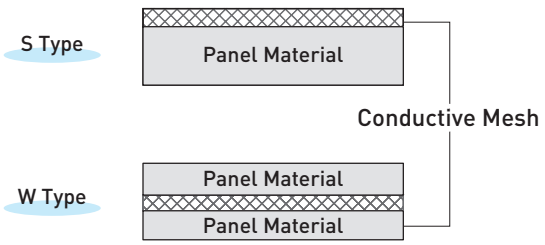
Construction Type	Mesh Type	Mesh Density	Material	Total Light Transmittance	Panel Thickness (Choose)
Single	1:Highly-permeable Mesh	#100	Polycarbonate Panel	>65%	2mm or 3mm
			Acrylic Panel		
	2:Normal Mesh	#132	Polycarbonate Panel	>58%	
			Acrylic Panel		
Double	1:Highly-permeable Mesh	#100	Polycarbonate Panel	>59%	4mm or 6mm

Part Number Structure

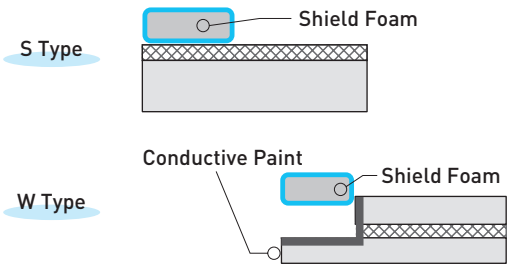
Part Number Format -Example-



Structual Diagram



Processing Example



Recommendation:Please use in conjunction with shield gaskets an d conductive adhesive tape.

ZIPPERTUBING (JAPAN), LTD.
https://www.ztj.co.jp/en/

Hong Kong Office

Unit 8 & 9, 27th Floor, Clifford Centre,
782 Cheung Sha Wan Road, Kowloon, Hong Kong
PHONE:+852-3113-0800　FAX:+852-3113-0803

Kobe Factory

6-18-2, Mitsugaoka, Kobe Nishi-ku, Hyogo,
651-2228, Japan

ISO9001 & ISO14001 Certification Acquired

ZIPPER TUBING(JAPAN) Ltd. is a company certified under the international standard ISO9001 for quality management systems and ISO14001 for environmental management systems.

■Certified Standards	ISO9001:2015+Amd 1:2024　ISO14001:2015+Amd 1:2024
■Accreditation Body	JAB
■Scope of audit	Design and Manufacture of Zippertube Products, and EMC S Suppression products,Thermal Management Covers.
■Business Locations	Kobe Factory, Saitama Factory, Vanguard (Japan)Co., Ltd.
■Certification Numbers	ISAQ1163, ISAES537

ISO 9001
ISO 14001
CERTIFIED
JAB
MS
CM034

Issued in June 2026, Catalog No. E-06-07(E)

Specifications subject to change without notice. All statements and technical information contained herein are based on tests we believe to be reliable, but the accuracy or completeness is not guaranteed under all circumstances. Before using ZTJ products, the user shall determine suitability for the intended use, and assumes all responsibility for improper selection.