

RFI/EMI Shielding Products are designed to either keep out or keep in electromagnetic interference. Shielding reflects and absorbs incident radiation waves. Although many applications require both environmental and EMI/RFI shielding, many do not, and are reliably shielded with BeCu contact strips.

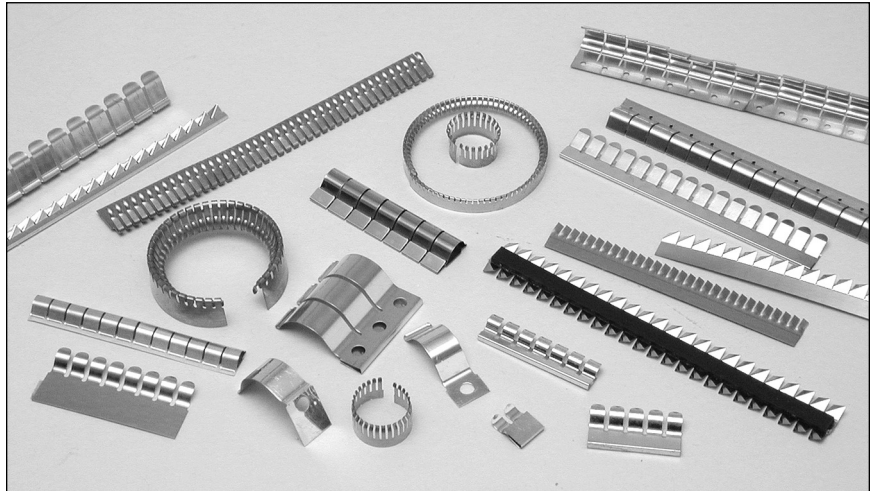
Contact Strips

Beryllium Copper (BeCu) is a high performance metal which can be fabricated into a wide variety of components. Its mechanical and electrical properties make it the ideal material for RFI/EMI shielding products. Beryllium copper's electrical properties provide shielding effectiveness over an extremely broad frequency range. At the same time, its mechanical properties yield a high deflection range, in addition to a long life without compression set.

BeCu alloy 25 (CA172) is used in these applications for maximum spring properties of strength and fatigue resistance. Consult the factory for high temperature applications. Some contact strips and "D" connector gaskets are also available in stainless steel. Contact the factory for availability.

Custom Designed Shielding

Ja-Bar Silicone Corporation supplies many custom designed beryllium copper and stainless steel shielding components for special applications from high volume requirements using progressive dies, to prototype and small quantities utilizing photoetch fabrication. Call for Data Sheets.



EMI SHIELDING PERFORMANCE

Material	H-Field - 100kHz	E-Field - 10MHz	P-Field - 1GHz
BeCu	>110 dB	>110 dB	<110 dB
Monel	60 dB	>115 dB	95 dB
T.C.S.	80 dB	125 dB	100 dB
Aluminum	38 dB	100 dB	80 dB

Note: Plating the mating surfaces and wire mesh with the same material will provide superior performance. Chromate chemical film on aluminum maintains surface conductivity by reducing corrosion.

Material Specifications

Chemical Composition

Beryllium: 1.80-2.00%
Cobalt plus nickel: 0.20% Min.
Cobalt + nickel + iron: 0.6% Max.
Copper: Balance

Physical Properties (heat treated)

Electrical conductivity (% IACS): 22-25
Modules of elasticity (psi): 18.5 x 10⁶

Mechanical Properties (heat treated)

Temper (1,000 psi) 1/4 HT 1/2 HT
Tensile strength: 175 Min. 185 Min.
Yield strength .2% offset: 150 Min. 160 Min.

Beryllium Copper Shielding

Series 300

Achieving Electrochemical Compatibility

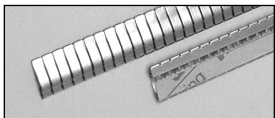
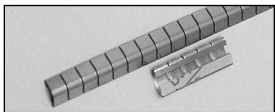
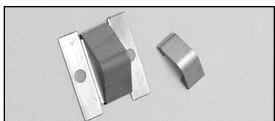
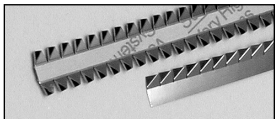
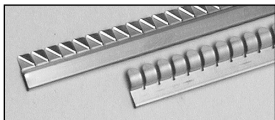
To avoid galvanic action between contacting metals refer to the following chart. Materials in adjacent groups may be safely used together. Choosing materials from within a single group in the table will provide the least corrosion due to galvanic action when the materials are in contact for an extended period of time with appropriate protective finish. Ja-Bar Silicone Corporation is happy to help you choose appropriate materials.

Grouping of Metals by Decreasing Galvanic Activity

Group 1	Group 2	Group 3	Group 4
Magnesium	Aluminum	Cadmium Plating	Brass
Magnesium Alloys	Aluminum Alloys	Carbon Steel	Stainless Steel
Aluminum	Zinc & Zinc Plating	Iron	Beryllium Copper
Aluminum Alloys	Chromium Plating	Nickel & Nickel Plating	Copper & Copper Alloys
Zinc & Zinc Plating	Cadmium Plating	Tin & Tin Plating	Nickel / Copper Alloys
Chromium Plating	Carbon Steel	Tin/Lead Solder	Monel
Aluminum Alloys	Iron	Brass	Silver
Zinc & Zinc Plating	Nickel & Nickel Plating	Stainless Steel	
Chromium Plating	Tin & Tin Plating	Beryllium Copper	
	Tin/Lead Solder	Copper & Copper Alloys	
		Nickel / Copper Alloys	
		Monel	

Available Finishes

Finish	Ordering Code	Finish	Ordering Code
Solderable	01	Tin Lead	07
Clean and Bright	02	Bright Tin	08
Gold	03	Nickel	09
Silver	04	Zinc/Clear Chromate	15
Cadmium/Clear Chromate	05	Electroless Nickel	18



A description of each mounting style follows:

Clip-on Mounting: Series 317 Clip-on Mounting provides a reliable mechanical installation when there is an accessible mounting flange. Various flange thicknesses can be accommodated, and lances can be incorporated to enhance the holding force to the flange.

Stick-on Mounting: Series 327 Pressure Sensitive Mounting provides double-sided pressure sensitive transfer tape for a fast, reliable installation. 3M F9469PC transfer tape is standard and may be used at ambient temperatures from -67°F to 300°F. Apply only on a clean, oil-free surface, and allow a 24-hour cure time. Consult the factory for other adhesives.

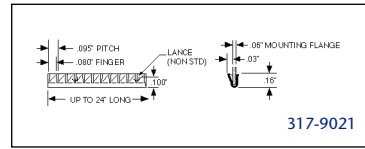
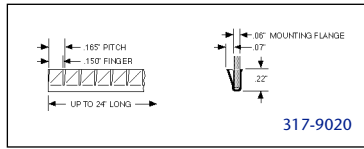
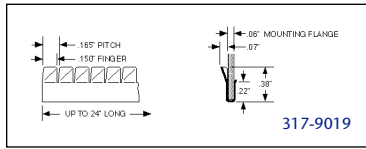
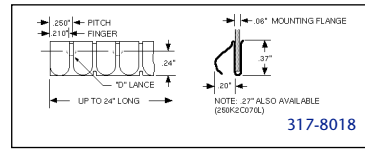
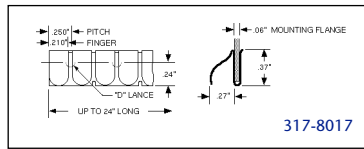
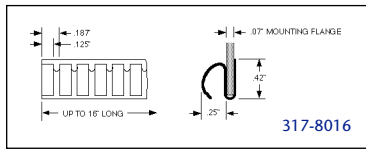
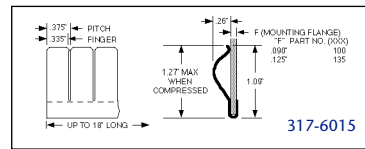
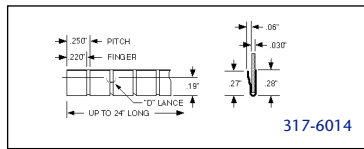
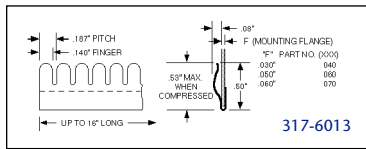
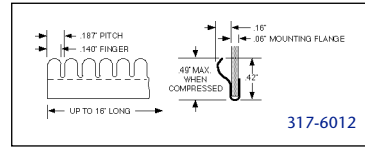
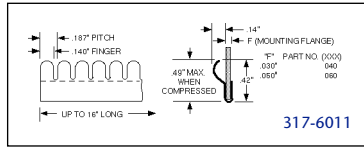
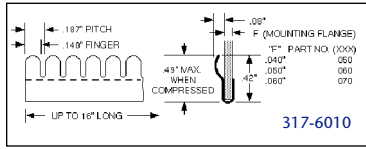
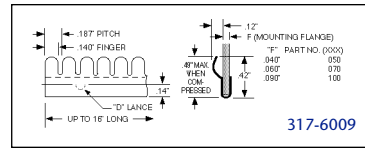
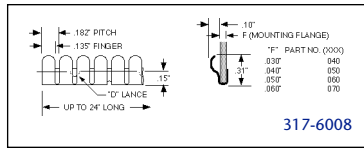
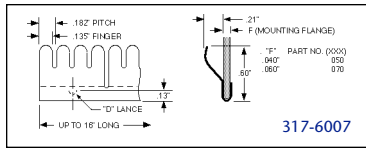
OMNI Mounting: Series 337 OMNI Mounting offers snap-on shielding preassembled on brass pads. OMNI shielding comes in lengths up to 16" and can be mounted as individual pads or in strips cut to multiples of the pad length. Double adhesive transfer tape or plastic rivets are available mounting options. The OMNI shielding configuration is also an excellent choice for bidirectional applications.

Snap-on Mounting: Series 347 Snap-on shielding is ideal for bi-directional applications, such as sliding drawers, doors and rack mounted assemblies. Snap-on shielding is easily mounted by snapping it into parallel slots or over a mounting track. Mounting track sold separately or in the "Snap-to-Trac" sets, can be installed by screws, rivets, spot welding, or pressure-sensitive, double-adhesive transfer tape. Order "T" Retaining Caps or Plastic Rivets for end stops for the shielding. Stops can also be incorporated in sheet metal. Hole diameter to mount track should be .125". Specify Plastic Rivets PR45 or PR60, if preferred.

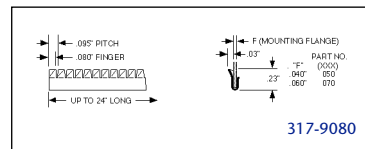
Hook-on Mounting: Series 357 Hook-on shielding is also ideal for bi-directional applications. The leading edge hooks over a flange and the shielding strip is held firmly in place with pressure sensitive adhesive.

Beryllium Copper Shielding

Series 300



Part No.	Thickness	Compression @25%	Compression @50%
Clip On Mounting Cylindrical Radius			
317-6007	Standard .005"	3.5 lbs/ft	16.4 lbs/ft
317-6008	Standard .005"	14.3 lbs/ft	49.3 lbs/ft
	"TF" Style .003"	4.5 lbs/ft	22.3 lbs/ft
317-6009	Standard .005"	12 lbs/ft	84 lbs/ft
	"TF" Style .0035"	Consult the Factory	Consult the Factory
317-6010	Standard .005"	23 lbs/ft	140 lbs/ft
317-6011	Standard .005"	18 lbs/ft	N/A
	"TF" Style .0035"	Consult the Factory	Consult the Factory
317-6012	Standard .005"	11 lbs/ft	69 lbs/ft
	"TF" Style .0035"	6.9 lbs/ft	20.9 lbs/ft
317-6013	Standard .005"	12 lbs/ft	93 lbs/ft
	Standard .006"	15 lbs/ft	83 lbs/ft
317-6014	Standard .006"	15 lbs/ft	83 lbs/ft
	"TF" Style .0035"	6.6 lbs/ft	30.1 lbs/ft
Strip Gaskets			
317-6015	Standard .005"	17 lbs/ft	43 lbs/ft
Reverse Bend Contacts			
317-8016	Standard .005"	12 lbs/ft	44 lbs/ft
317-8017	Standard .005"	5 lbs/ft	15 lbs/ft
317-8018	Standard .005"	5 lbs/ft	15 lbs/ft
Twisted Contacts			
317-9019	Standard .003"	10 lbs/ft	22 lbs/ft
317-9020	Standard .003"	10 lbs/ft	22 lbs/ft
317-9021	Standard .003"	32 lbs/ft	48 lbs/ft
317-9080	Standard .003"	32 lbs/ft	48 lbs/ft

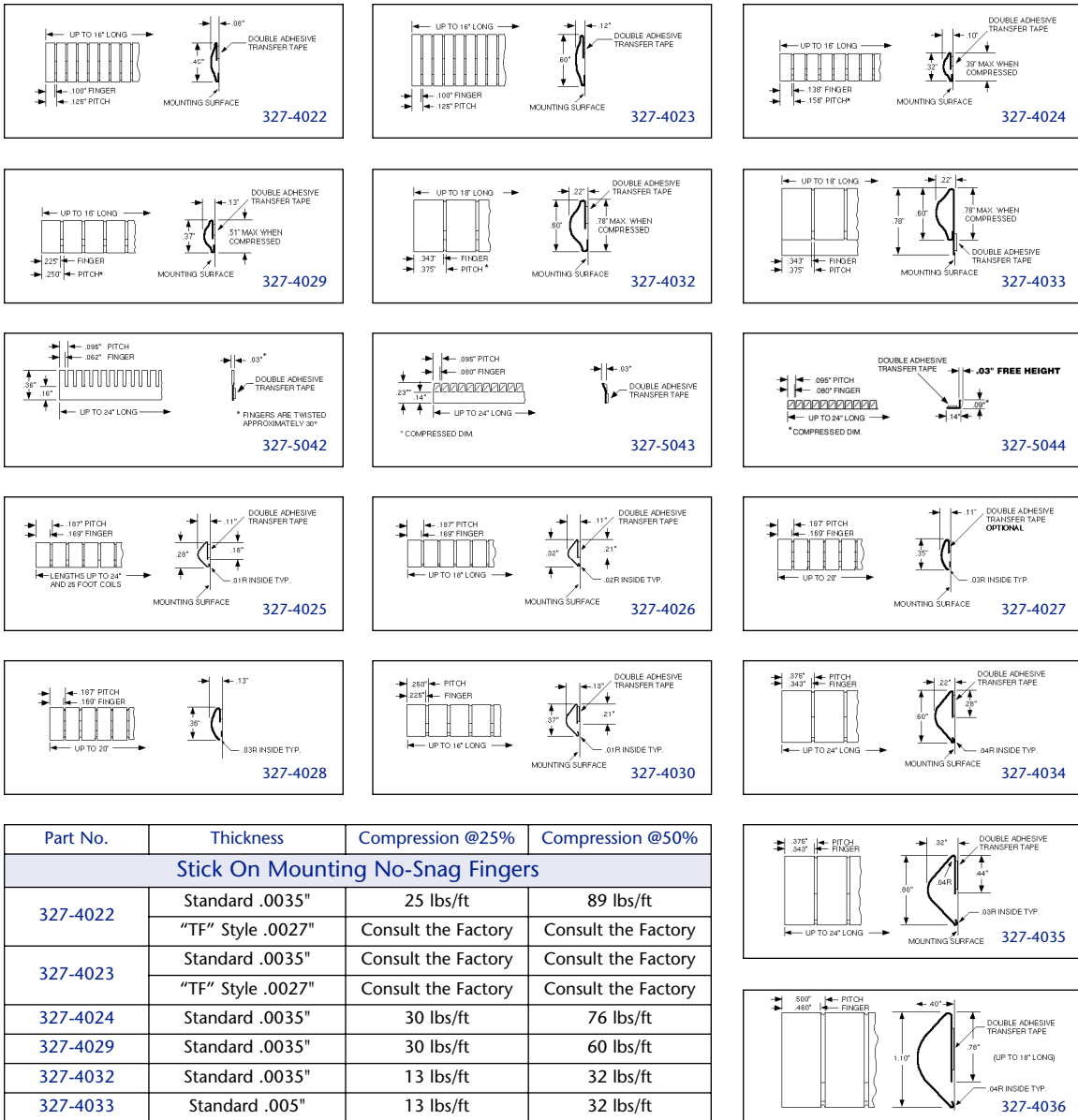


Series 300

Beryllium Copper Shielding

Series 300

Series 300



Part No.	Thickness	Compression @25%	Compression @50%
Stick On Mounting No-Snag Fingers			
327-4022	Standard .0035"	25 lbs/ft	89 lbs/ft
	"TF" Style .0027"	Consult the Factory	Consult the Factory
327-4023	Standard .0035"	Consult the Factory	Consult the Factory
	"TF" Style .0027"	Consult the Factory	Consult the Factory
327-4024	Standard .0035"	30 lbs/ft	76 lbs/ft
327-4029	Standard .0035"	30 lbs/ft	60 lbs/ft
327-4032	Standard .0035"	13 lbs/ft	32 lbs/ft
327-4033	Standard .005"	13 lbs/ft	32 lbs/ft
Panel Gaskets			
327-5042	Standard .005"	15 lbs/ft	69 lbs/ft
327-5043	Standard .003"	12 lbs/ft	48 lbs/ft
	"TF" Style .002"	2.5 lbs/ft	10.4 lbs/ft
327-5044	Standard .003"	9 lbs/ft	22 lbs/ft
	"TF" Style .002"	2.2 lbs/ft	6.6 lbs/ft
Soft No-Snag Fingers			
327-4025	Standard .002"	15 lbs/ft	32 lbs/ft
327-4026	Standard .002"	14 lbs/ft	26 lbs/ft
327-4027	Standard .003"	25 lbs/ft	89 lbs/ft
	"TF" Style .002"	6 lbs/ft	23 lbs/ft
327-4028	Standard .003"	Consult the Factory	Consult the Factory
327-4030	Standard .002"	10 lbs/ft	21 lbs/ft
327-4034	Standard .0035"	10 lbs/ft	20 lbs/ft
	"TF" Style .002"	2 lbs/ft	7.2 lbs/ft
327-4035	Standard .004"	7 lbs/ft	17 lbs/ft
327-4036	Standard .005"	12 lbs/ft	24 lbs/ft

D-Sub Connector Gaskets
BeCu and Stainless Steel

	3B8-0004 : Beryllium 3S8-0004 : Stainless Steel 9 Pin "D" Connector		
	Dash No.	A Dim	B Dim
	-01	0.44"	0.22"
-02	0.35"	0.18"	

	3B8-0001 : Beryllium 3S8-0001 : Stainless Steel 15 Pin "D" Connector		
	Dash No.	A Dim	B Dim
	-01	0.44"	0.22"
-02	0.35"	0.18"	

	3B8-0005 : Beryllium 3S8-0005 : Stainless Steel 25 Pin "D" Connector		
	Dash No.	A Dim	B Dim
	-01	0.44"	0.22"
-02	0.35"	0.18"	

	3B8-0002 : Beryllium 3S8-0002 : Stainless Steel 37 Pin "D" Connector		
	Dash No.	A Dim	B Dim
	-01	0.44"	0.22"
-02	0.35"	0.18"	

	3B8-0003 : Beryllium 3S8-0003 : Stainless Steel 50 Pin "D" Connector		
	Dash No.	A Dim	B Dim
	-01	0.55"	0.28"
-02	0.45"	0.23"	