



# ElectroCoat Conductive OverCoat for H.F. Shielding

## ElectroCoat™ Extruded

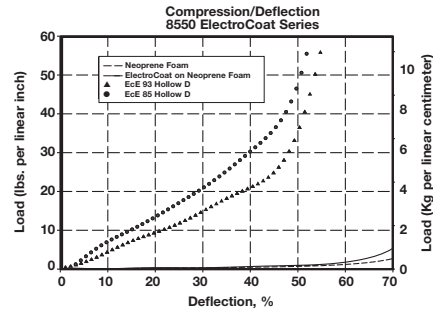
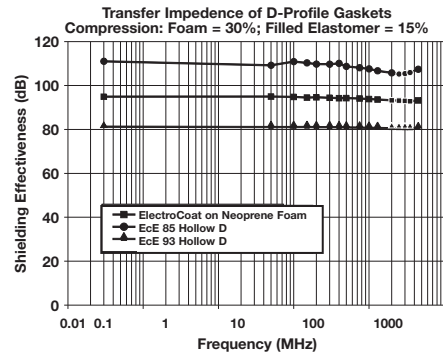
ElectroCoat is a thin, flexible surface coating consisting of a silver-filled silicone elastomer. The versatile coating can be easily applied to die-cut or molded foams for both gasket and non-gasket applications. It can also be applied to molded or extruded elastomers, other polymers, and a wide range of other materials.

- Excellent shielding effectiveness – greater than 90 dB measured by transfer impedance
- Solid, continuous, conductive coating over the entire gasket surface, including the inner die-cut surfaces of foam gaskets
- Coated foam gaskets have very low compression force
- Exceptionally wide compression range from 10% to 70% deflection to accommodate uneven gaps in enclosure housings
- Flexible coating withstands gasket compression with no decrease in shielding effectiveness after 1000 cycles of 40% compression
- Durable coating has excellent adhesion to elastomers and other polymers. Two hundred cycles of sliding/shear abrasion testing of a coated D profile foam, at 25% compression, showed no peeling or flaking
- The thin coating has minimal effect on the physical properties of the substrate gasket material. Even on very soft foam rubber, the coated gasket has only a 2% to 6% higher compression force than the uncoated foam.
- The coating will maintain the flammability rating of the inner core material. Coated neoprene foam meets ULV094 at 0.045 in (1,1 mm) thickness

Other coating and cores are also available as well as custom variations including thread or inserts.

The appropriate material is chosen by taking into account the conductivity which is directly linked to the shielding properties, the hardness and the environmental constraints. Combinations 5010 and 5110, or their flame resistant counter parts 6010 or 6110, will meet most of the requirements at a reasonable cost.

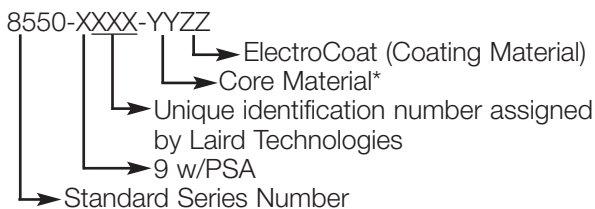
In order to maintain product effectiveness, they must be handled with care, without subjecting them to unnecessary effort, and mounting them on clean surfaces clear of all greases and solvents. The compounds with silver plated particles may become darker in colour when they are exposed to light without any effect on their performance. Avoid putting into contact with sulphurous product.



# ElectroCoat Conductive OverCoat for H.F. Shielding

## Ordering Information

1. Determine if PSA is needed. If so, replace the 5th digit in the part number with "9".
2. Select desired core material from Table 1 and insert in place of YY.
3. Select two digit ElectroCoat from Table 2 and insert in place of ZZ.
4. A unique custom identification number will be assigned by sales.



Example: 8550-9XXX-5010 is a Silver/Silicone ElectroCoat with a Silicone Foam core and PSA.

Table 1.

YY #	Core Material*	Shore Hardness
50	Silicone Foam **	5 < D < 10
51	Solid Silicone	50
52	Neoprene Foam	25 < D < 35
53	Polyurethane Foam	25 < D < 35
54	Solid Silicone	70
60	Flame resistant Foam silicone	5 < D < 10
61	Flame resistente silicone	57
64	Flame resistente silicone	60 < D < 70

Please note: For polyurethane and neoprene core, the adhesion of the coating is lower than at the silicone core and a test is needed.

Table 2.

ZZ Coating #	Material
10	Silver/Silicone

- \* Other core and coating materials may be available.
- \*\* Available ≥ 0.08 inch (2 mm)

Consult Laird Technologies sales department.

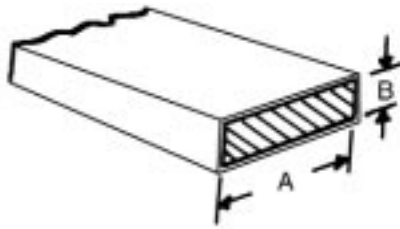
All dimensions shown are in inches (millimeters) unless otherwise specified.



## Tolerances All Profiles

Dimensions	Tolerance
Under 0.101 (2,6)	± 0.005 (0,15)
0.101 to 0.200 (2,6 to 5,1)	± 0.008 (0,2)
0.201 to 0.300 (5,1 to 7,6)	± 0.010 (0,3)
0.301 to 0.500 (7,6 to 12,7)	± 0.015 (0,4)
Over 0.500 (12,7)	± 0.020 (0,5)

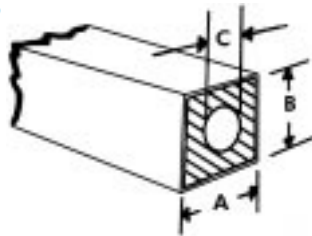
Figure 1.  
Rectangular Strip



## Rectangular Strips

MIL-DTL-85328 Part Number	Part Number	Nominal Dimensions	
		A	B
	8861-0179	0.079 (2,1)	0.039 (0,8)
	8861-0180	0.126 (3,2)	0.039 (1,0)
	8861-0125	0.250 (6,4)	0.062 (1,6)
	8861-0183	0.378 (9,6)	0.063 (1,6)
	8861-0176	0.472 (12,0)	0.031 (0,8)
	8861-0182	0.500 (12,7)	0.059 (1,5)
	8861-0185	0.748 (19,0)	0.075 (1,9)
	8861-0178	0.827 (1,6)	0.031 (1,0)
	8861-0187	0.874 (22,2)	0.091 (2,3)
	8861-0192	1.00 (25,4)	0.126 (3,2)

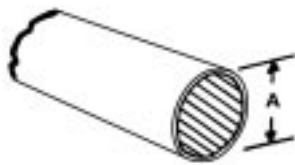
Figure 2.  
Hollow Rectangular Strip



## Hollow Rectangular Strips

Number	Nominal Dimensions		
	A	B	C
8862-0113	0.200 (5,1)	0.130 (3,3)	0.090 (2,3)
8862-0114	0.250 (6,4)	0.250 (6,4)	0.156 (4,0)
8862-0105	0.375 (9,5)	0.375 (9,5)	0.188 (4,8)
8862-0116	0.375 (9,5)	0.250 (6,4)	0.201 (4,0)
8862-0119	0.375 (9,5)	0.375 (9,5)	0.281 (7,1)
8862-0117	0.375 (9,5)	0.305 (7,7)	0.126 (3,2)
8862-0120	0.402 (10,2)	0.402 (10,2)	0.201 (5,1)
8862-0121	0.413 (10,5)	0.453 (11,5)	0.323 (8,2)

Figure 3.  
O-Strip



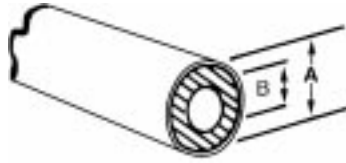
## O-Strips

MIL-DTL-85328 Part Number	Part Number	Recommended Groove Dimensions (±0.002)		
		A	Width	Height
	8863-0105	0.053 (1,4)	0.059 (1,5)	0.042 (1,1)
	8863-0115	0.070 (1,8)	0.076 (1,9)	0.056 (1,4)
	8863-0120	0.080 (2,0)	0.086 (2,2)	0.064 (1,6)
	8863-0196	0.098 (2,5)	0.105 (2,7)	0.078 (2,0)
	8863-0135	0.112 (2,8)	0.119 (3,0)	0.089 (2,3)
	8863-0145	0.125 (3,2)	0.133 (3,4)	0.100 (2,5)
	8863-0160	0.139 (3,5)	0.147 (3,7)	0.111 (2,8)
	8863-0165	0.150 (3,8)	0.158 (4,0)	0.120 (3,0)
	8863-0170	0.160 (4,1)	0.168 (4,3)	0.128 (3,3)
	8863-0197	0.186 (4,7)	0.197 (5,0)	0.149 (3,8)
	8863-0198	0.194 (4,9)	0.209 (5,3)	0.156 (4,0)
	8863-0199	0.197 (5,0)	0.210 (5,3)	0.158 (4,0)
	8863-0175	0.216 (5,5)	0.229 (5,8)	0.173 (4,4)
	8863-0200	0.256 (6,5)	0.274 (7,0)	0.205 (5,2)
	8863-0201	0.312 (7,9)	0.337 (8,6)	0.250 (6,4)
	8863-0202	0.374 (9,5)	0.400 (10,2)	0.300 (7,6)

All dimensions shown are in inches (millimeters) unless otherwise specified.



**Figure 4.**  
O-Strip Tubing



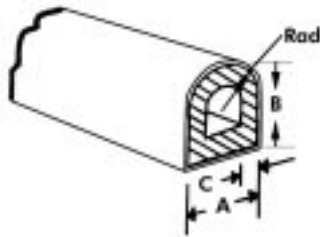
## O-Strip Tubing

MIL-DTL-85328 Part Number	Part Number	Nominal Dimensions	
		A	B
	8864-0136	0,085 (2,2)	0,035 (0,9)
	8864-0060	0,085 (2,2)	0,040 (1,0)
	8864-0173	0,085 (2,2)	0,050 (1,3)
	8864-0156	0,090 (2,3)	0,040 (1,0)
	8864-0161	0,090 (2,3)	0,045 (1,1)
	8864-0090	0,090 (2,3)	0,050 (1,3)
	8864-0095	0,103 (2,6)	0,040 (1,0)
	8864-0142	0,103 (2,6)	0,050 (1,3)
	8864-0172	0,110 (2,8)	0,062 (1,6)
	8864-0153	0,115 (2,9)	0,062 (1,6)
	8864-0100	0,125 (3,2)	0,045 (1,1)
	8864-0101	0,125 (3,2)	0,062 (1,6)
	8864-0102	0,130 (3,3)	0,062 (1,6)
	8864-0104	0,145 (3,7)	0,070 (1,8)
	8864-0171	0,149 (3,8)	0,125 (3,2)
	8864-0105	0,156 (4,0)	0,050 (1,3)
	8864-0163	0,156 (4,0)	0,062 (1,6)
	8864-0139	0,168 (4,3)	0,069 (1,8)
	8864-0162	0,177 (4,5)	0,092 (2,3)

## O-Strip Tubing

MIL-DTL-85328 Part Number	Part Number	Nominal Dimensions	
		A	B
	8864-0143	0,177 (4,5)	0,079 (2,0)
	8864-0168	0,188 (4,8)	0,120 (3,0)
	8864-0147	0,216 (5,5)	0,125 (3,2)
	8864-0167	0,228 (5,8)	0,169 (4,3)
	8864-0110	0,250 (6,4)	0,125 (3,2)
	8864-0160	0,312 (7,9)	0,188 (4,8)
	8864-0120	0,312 (7,9)	0,192 (4,9)
	8864-0144	0,330 (8,4)	0,250 (6,4)
	8864-0050	0,375 (9,5)	0,235 (6,0)
	8864-0125	0,375 (9,5)	0,250 (6,4)
	8864-0127	0,400 (10,2)	0,200 (5,1)
	8864-0170	0,422 (10,7)	0,319 (8,1)
	8864-0166	0,490 (12,4)	0,414 (10,5)
	8864-0140	0,513 (13,0)	0,190 (4,8)
	8864-0135	0,513 (13,0)	0,438 (11,1)
	8864-0055	0,555 (14,0)	0,447 (11,4)
	8864-0159	0,623 (15,8)	0,366 (9,3)
	8864-0053	0,630 (16,0)	0,375 (9,5)

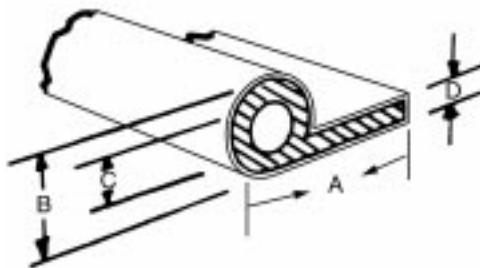
**Figure 5**  
Hollow D-Strip



## Hollow D-Strips

MIL-DTL-83528 Part Number	Part Number	Dimensions			
		A	B	Rad	C
	8866-0160	0.098 (2,5)	0.098 (2,5)	0.049 (1,2)	0.020 (0,5)
	8866-0162	0.109 (2,8)	0.125 (3,2)	0.054 (1,4)	0.024 (0,6)
	8866-0163	0.146 (3,7)	0.146 (3,7)	0.073 (1,9)	0.016 (0,4)
	8866-0100	0.156 (4,0)	0.156 (4,0)	0.078 (2,0)	0.045 (1,1)
	8866-0161	0.157 (4,0)	0.122 (3,1)	0.078 (2,0)	0.043 (1,1)
	8866-0105	0.187 (4,7)	0.187 (4,8)	0.093 (2,4)	0.050 (1,3)
	8866-0165	0.236 (6,0)	0.252 (6,4)	0.012 (0,3)	0.039 (1,0)
	8866-0110	0.250 (6,4)	0.250 (6,4)	0.125 (3,2)	0.065 (1,7)
	8866-0167	0.295 (7,5)	0.311 (7,9)	0.147 (3,7)	0.039 (1,0)
	8866-0168	0.358 (9,1)	0.374 (9,5)	0.179 (4,5)	0.039 (1,0)
	8866-0166	0.374 (9,5)	0.252 (6,4)	0.187 (4,8)	0.039 (1,0)
	8866-0169	0.421 (10,7)	0.427 (11,1)	0.210 (5,3)	0.039 (1,0)

**Figure 6.**  
P-Strip



## P-Strips

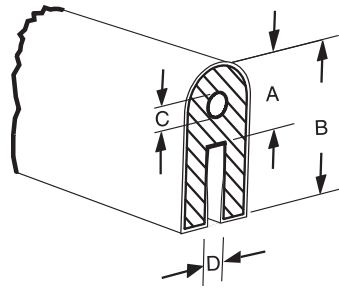
MIL-DTL-83528 Part Number	Part Number	Dimensions			
		A	B	C	D
	8867-0149	0.252 (6,4)	0.039 (1,0)	0.016 (0,4)	0.028 (0,7)
	8867-0150	0.252 (6,4)	0.063 (1,6)	0.031 (0,8)	0.016 (0,8)
	8867-0151	0.252 (6,4)	0.079 (2,0)	0.035 (0,9)	0.016 (0,9)
	8867-0156	0.374 (9,5)	0.252 (6,4)	0.150 (3,8)	0.063 (1,6)
	8867-0153	0.375 (9,5)	0.187 (4,8)	0.131 (3,3)	0.040 (1,0)
	8867-0159	0.563 (14,3)	0.312 (7,9)	0.186 (4,7)	0.063 (1,6)
	8867-0155	0.650 (16,5)	0.201 (5,1)	0.079 (2,0)	0.063 (1,6)
	8867-0160	0.748 (19,0)	0.354 (9,0)	0.228 (5,8)	0.063 (1,6)

All dimensions shown are in inches (millimeters) unless otherwise specified.



# ElectroCoat Extrusion

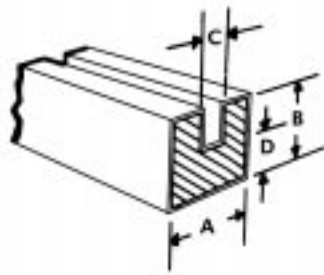
Figure 7.  
A-Strip



## A-Strips

MIL-DTL-83528 Part Number	Part Number	Dimensions			
		A	B	C	D
	8869-0144	0.197 (5)	0.394 (10)	0.062 (1,6)	0.047 (1,6)

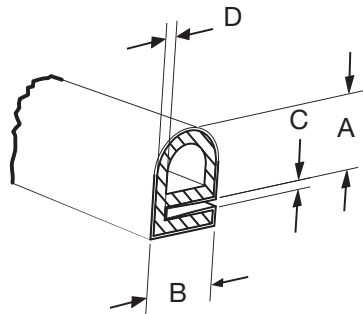
Figure 8.  
Channel Strip



## Channel Strips

MIL-DTL-83528 Part Number	Part Number	Dimensions			
		A	B	C	D
	8868-0115	0.156 (4,0)	0.156 (4,0)	0.062 (1,6)	0.047 (1,2)
	8868-0078	0.156 (4,0)	0.156 (4,0)	0.076 (1,9)	0.046 (1,2)
	8868-0079	0.157 (4,0)	0.189 (4,8)	0.063 (1,6)	0.063 (1,6)
	8868-0082	0.189 (4,8)	0.189 (4,8)	0.072 (1,8)	0.070 (1,8)
	8868-0085	0.252 (6,4)	0.252 (6,4)	0.126 (3,2)	0.063 (1,6)
	8868-0086	0.374 (9,5)	0.374 (9,5)	0.157 (4,0)	0.079 (2,0)

Figure 9  
G-Strip



## G-Strips

MIL-DTL-83528 Part Number	Part Number	Dimensions			
		A	B	C	D
	8864-0149	0.216 (5,5)	0.229 (5,8)	0.062 (1)	0.047 (1)

Other dimensions may be available.  
Consult Laird Technologies sales department.



# Fabricated components



## ElectroCoat™ Die cut gasket and molded parts

Any thickness from 1 mm. Gaskets can also be delivered with conductive or insulating P.S.A. on all or selected areas. Standard thickness and tolerance for die cut gaskets are as follows:

### Tolerances

Dimensions	Tolerance
under 0.039 (1)	± 0.005(0,13)
from 0.040 (1,01) to 0.079 (2)	± 0.007 (0,18)
from 0.080 (2,01) to 0.120 (3)	± 0.008 (0,20)

All dimensions shown are in inches (millimeters) unless otherwise specified.