



components

RFI-EMI conductive shielding fabrics

Shielding effectiveness is determined by a combination of two events: reflection and absorption of RF signals. Absorption depends on the bulk, or thickness, of the shield material. However, reflection occurs at the shield surface and its effectiveness is independent of thickness. Reflection is the determining factor for all high frequency signal attenuation. (Note: When these materials are used in another regime; i.e., conductive shielding gaskets, conductivity is the determinant.)

Maximum reflection occurs with the highest conductivity materials. The best overall metals are copper, nickel and combinations of both - based on high conductivity, compatibility with mating metals, manufacturing versatility and cost. The large 41.0" material width (1040mm) minimizes seams; thin .003" - .004" cross sections (0,08 - 0,10mm) maximize conformability to irregular surfaces.

applications

- Bonding or laminating to complex geometric shapes (includes optional hot melt adhesive, or conductive adhesive backing)
- Large surface coverage with minimal seams due to 41.0" material width (1040,0mm)
- ESD, RFI-EMI; shielding attenuation >70.0 dB up to 10.0 GHz for CuNi type.
- Enclosure panels and frames, seams, joints, shield curtains for back panel openings
- RFI-EMI conductive shielding gasket cover membranes (i.e., with foam or silicone core structures)
- Architectural shielding; shielded room finishing - ceilings, walls, floors; special purpose rooms



equipment, architectural

options

- All materials are available in non-adhesive, hot melt adhesive or conductive adhesive backing
- Standard sheets are 41" x 36" (1040,0 x 914,0mm)
- Longer lengths may be ordered by adding a suffix "X" to any part # with qualifier; i.e., X = 73" (1854,0mm)
- Full rolls are 325'-0 long (100M), and can be ordered by specifying the suffix "X" with qualifier; i.e., X = 325' roll (100M). Note: conductive adhesive versis are 164' (50M) long.

Part No.	Description	Width	Length	Thickness	Surface Resistivity	Attenuation (dB)			
						500KHz	100MHz	300MHz	1GHz
SF005PCN	Polyester Cloth w/CuNi	42.0 1066,8	36.0 914,0	.0035 0,09	.005 ohm/mm ²	≥79	≥81	≥86	≥82
SF030PCU	Polyester Cloth w/Cu	40.0 1016,0	36.0 914,0	.0030 0,08	.030 ohm/mm ²	~60	≥67	≥65	≥62
SF050PNI	Polyester Cloth w/Ni	42.0 1066,8	36.0 914,0	.0040 0,10	.050 ohm/mm ²	~60	≥72	≥67	≥63
w/Hot Melt Adhesive	Description	Width	Length	Thickness	Surface Resistivity	Attenuation (dB)			
						500KHz	100MHz	300MHz	1GHz
SF005PCN-HM	Polyester Cloth w/CuNi	40.0 1016,0	36.0 914,0	.0035 0,09	.005 ohm/mm ²	≥79	≥81	≥86	≥82
SF030PCU-HM	Polyester Cloth w/Cu	40.0 1016,0	36.0 914,0	.0030 0,08	.030 ohm/mm ²	~60	≥67	≥65	≥62
SF050PNI-HM	Polyester Cloth w/Ni	40.0 1016,0	36.0 914,0	.0040 0,10	.050 ohm/mm ²	~60	≥72	≥67	≥63
w/Conductive Adhesive	Description	Width	Length	Thickness	Surface Resistivity	Attenuation (dB)			
					500KHz	100MHz	300MHz	1GHz	
SF005PCN-CA	Polyester Cloth w/CuNi	42.0 1066,8	36.0 914,0	.0035 0,09	.005 ohm/mm ²	≥79	≥81	≥86	≥82
SF030PCU-CA	Polyester Cloth w/Cu	42.0 1066,8	36.0 914,0	.0030 0,08	.030 ohm/mm ²	~60	≥67	≥65	≥62
SF050PNI-CA	Polyester Cloth w/Ni	42.0 1066,8	36.0 914,0	.0040 0,10	.050 ohm/mm ²	~60	≥72	≥67	≥63

All dimensions are in inches *millimeters*. *Available in 325' rolls (100M).