

ME-2200

RF Isolation Nylon Mesh



ME-2200 is a simple solution for effective RF signal attenuation in many commercial applications. It is suitable to be used alone or encapsulated in various materials as a RF barrier. You can see through the mesh material, therefore it can be used in RF isolation windows, alone or between panes of plastic or glass.

This product provides -100 dB RF isolation from 100 MHz to 1 GHz and more than -85 dB to 18GHz. The mesh is very light, thin, extremely flexible, wear and tear resistant.

Typical applications:

- RFID blocking wallets, bags and clothing.
- Security uses, including RF shielding to prevent the use of cellular telephones and other communication devices (including covert ones) in selected areas.
- Construction of RF quiet zones for scientific and developmental research.
- Isolation of noisy RF sources to protect sensors and receivers.
- Isolation of cell tower transmitters to protect building inhabitants.
- Extraneous Artifact Reduction in MRI and other High RF Flux Applications.
- Wideband EMI Shielding.

FEATURES:

Construction:

ME-2200 is a single layer flexible panel consisting of isolation ground plane material.

Size:

ME-2200 Typically supplied in rolls of 52 in minimum (132 cm). It can be cut to customer size requirements.

Color:

ME-2200 is brass colored on both sides.

Mechanical properties:

Substrate	Rip stop nylon mesh
Metal	Nickel / Copper
Weight	2 oz /yard ²
Thickness	0.05 in (0.0127 cm)
Thermal Stability	Range of -40°F to 160°F
Elongation MD	9% (per ASTM D5035)
Tensile Strength	7.5 /18.5 lb. /in (CMD / MD)
Hazardous Material	None
Visual Defects:	Uniform surface texture and appearance
Thermal Cycles:	10 cycles, 1 hr/-20°F - 1 hr/70° F, no adverse effects
Low Temperature Impact:	-20°F, 1.5 ft. lbs., and no adverse effects
Effects of Liquids Oil:	No adverse effects after 1000 hours (ASTM-B-117)
Effects of Liquids, Water:	Less than 6% increase in volume (ASTM-D-471)

Performance:

-100 dB RF isolation from 100 MHz to 1 GHz

Greater than -85 dB RF isolation from 1 GHz to over 18 GHz

Nail, screw and staple punctures have no effect on signal attenuation