



Metal Rubber™ Sheet

NSM-MR-03-S1-06

NSM-MR-03-S1-12

NSM-MR-02-E1

Product Description

Metal Rubber™ is a unique self-assembled nanocomposite that combines the high electrical conductivity of metals with the low mechanical modulus of elastomers. Self-assembly processing allows the simultaneous modification of conductivity and modulus during manufacturing. A range of mechanical properties is available upon special order. NSM-MR-03-S1 is comprised of:

- Noncorrosive gold
- Low glass transition temperature (T_g) polymer matrix resin (-60 °C)



Applications for Sheets

Metal Rubber has been demonstrated in a wide range of applications including, but not limited to: large mechanical deformation sensors, mechanically flexible electrical interconnects, and lightweight, durable, conformal electromagnetic shielding appliques or decals.

Material Properties

Typical Values

- | | |
|---|-----------------|
| • Sheet resistance: | 1.0 to 10.0 Ω/□ |
| • Mechanical strain (percent elongation): | 225 to 250 % |

Standard Product Information

Product Number	Product Description	Dimensions	Thickness
NSM-MR-03-S1-06	Metal Rubber Sheet (I EA)	6" x 6"	0.5 mm ± 0.2 mm
NSM-MR-03-S1-12	Metal Rubber Sheet (I EA)	12" x 12"	0.5 mm ± 0.2 mm
NSM-MR-02-E1	I Rectangular Electrode Sample	1.5" x 0.5"	0.5 mm ± 0.2 mm

NSM-MR-03-S1-06 and NSM-MR-03-S1-12 may have visual anomalies that do not affect material properties. NSM-MR-02-E1 may be slightly imperfect in size and/or color, but the physical properties are the same. NSM-MR-02-E1 also meets ASTM, D 882 standards for testing purposes.

Product Information

For additional product information, please contact a NanoSonic sales representative:

Phone: 540.626.6266

E-mail: sales@nanosonic.com