



**Metal Rubber™ Sensors**  
**NSM-MR-01-D5 (pack of 5)**  
**NSM-MR-01-D1 (1 sample)**

**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 both conductivity and modulus during manufacturing. A range of mechanical properties is available upon special order. NSM-MR-01-D series is comprised of:

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



**Applications for Sensors**

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.

**Material Properties**

**Typical Values**

- |   |                              |
|---|------------------------------|
| • Sheet resistance:                       | 1.0 to 10.0 $\Omega/\square$ |
| • Mechanical strain (percent elongation): | 225 to 250 %                 |

**Standard Product Information**

Product Number	Description	Dimensions	ASTM	Thickness	Delivery Time
NSM-MR-01-D5	Pack of 5 Dogbone Sensors	2.5" x 0.5"	D 638	1 mm $\pm$ 0.2 mm	1-2 weeks
NSM-MR-01-D1	1 Dogbone Sensor Sample				

NSM-MR-01-D5 may have visual anomalies that do not affect material properties.

NSM-MR-01-D1 may be slightly imperfect in size and/or color, but the physical properties are the same.

**Product Information**

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

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