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

<table>
<thead>
<tr>
<th>Material Properties</th>
<th>Typical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet resistance:</td>
<td>1.0 to 10.0 ( \Omega / \square )</td>
</tr>
<tr>
<td>Mechanical strain (percent elongation):</td>
<td>225 to 250 %</td>
</tr>
</tbody>
</table>

Standard Product Information

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Dimensions</th>
<th>ASTM</th>
<th>Thickness</th>
<th>Delivery Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSM-MR-01-D5</td>
<td>Pack of 5 Dogbone Sensors</td>
<td>2.5” x 0.5”</td>
<td>D 638</td>
<td>1 mm ± 0.2 mm</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>NSM-MR-01-D1</td>
<td>1 Dogbone Sensor Sample</td>
<td></td>
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</tr>
</tbody>
</table>

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:
Phone: 540.626.6266, E-mail: sales@nanosonic.com

No Warranties: Product is sold with no warranties, representation or guarantees expressed, implied or otherwise.