CONDUCTIVE SILICONE ELASTOMER

■ Characteristic
This product is manufactured by extrusion or hot-press process while mixing conductive metal powder and silicon in a proprietary ratio. The metal powder gives excellent electric conductivity and the silicon rubber binder provides excellent thermal durability and hermetical seal. It is also environmentally friendly.

There are three conductive fillers available: Ag/Cu, Ni/Graphite, and Carbon. Choice is made depending on the required resistance level and cost consideration.

■ Application
- Where both EMI shielding and hermetical sealing are required
- Where both EMI shielding and extreme heat durability are required
- Medical devices
- Military communication devices
- Military air-conditioning system

■ Available Profiles

1. Solid Round
   Dia: 0.71
   to 4.57 mm

2. Tube
   Dia: 1.52
   to 6.35 mm

3. Solid D
   W: 1.57 mm
   H: 1.73 mm

4. D Tube
   OH: 4.0 mm
   H: 1.73 mm
   OW: 4.0 mm
   T: 2.0 mm
   ID: 4.0 mm
   OD: 5.0 mm
   L: 10.0 mm

5. P Shape
   W: 1.57 mm
   H: 3.0 mm
   OW: 4.0 mm
   ID: 4.0 mm
   OD: 5.0 mm
   L: 20.0 mm

6. Sheet
   H: 3.0 mm
   W: 1.57 mm
   L: 25.0 mm

■ Material and Technical data

<table>
<thead>
<tr>
<th>Conductive Filler</th>
<th>CSREA-AGCU</th>
<th>CSREA-NIG</th>
<th>CSREA-C</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness (Shore A)</td>
<td>Ag-plated Cu</td>
<td>Ni &amp; Graphite</td>
<td>Carbon</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Specific Gravity (g/cm³)</td>
<td>3.5~4.0</td>
<td>50~70</td>
<td>60~70</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Volume Resistivity (ohm-cm)</td>
<td>0.02</td>
<td>2</td>
<td>5</td>
<td>ASTM D257</td>
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<tr>
<td>Elongation (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Tensile Strength (kgf/cm²)</td>
<td>16~17</td>
<td>16~17</td>
<td>65~72</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Tear Strength (kgf/cm)</td>
<td>6~7</td>
<td>6~7</td>
<td>12~14</td>
<td>ASTM D6248</td>
</tr>
<tr>
<td>Continuous Usage Temp. (℃)</td>
<td>-55 to +160</td>
<td>-55 to +170</td>
<td>-55 to +200</td>
<td></td>
</tr>
</tbody>
</table>

Example Applications

[Images of various applications]