

**CEE-C001 ELECTRICALLY CONDUCTIVE  
CARBON FILLED SILICONE ELASTOMER****Product overview**

CEE-C001 is a semi conductive composite material comprising of silicone elastomer and carbon particles. It is formulated for the production of extruded sections/gaskets that offer a combined high level of EMI shielding and environmental sealing over a wide temperature range. The silicone elastomer base provides excellent resistance to environmental degradation.

CEE-C001 is suitable for use where a level of shielding is required in high voltage applications due to this material's inherent ability to withstand breakdown under these conditions.

| <b>Cured Properties</b>             |                                      |
|-------------------------------------|--------------------------------------|
| Colour                              | Black                                |
| Density                             | 1.2 gcm <sup>-3</sup>                |
| Hardness Range                      | 30-80 Shore A<br>Standard 65 Shore A |
| Volume resistivity                  | <10Ω.cm                              |
| Tear strength                       | 7kN/m                                |
| Tensile strength                    | 7 MPa                                |
| Elongation                          | 180%                                 |
| Compression set – 72 hours at 100°C | 40%                                  |
| Service temperature range           | -40°C to 200°C                       |
| Maximum intermittent temperature    | 250°C                                |

**CEE-C001 ELECTRICALLY CONDUCTIVE  
CARBON FILLED SILICONE ELASTOMER****Shielding Effectiveness**

|                    |      |
|--------------------|------|
| 200kHz (H field)   | 30dB |
| 100MHz (E field)   | 65dB |
| 500MHz (E field)   | 60dB |
| 2GHz (Plane wave)  | 40dB |
| 10GHz (Plane wave) | 30dB |

**Available forms**

This material is available in a wide range of solid and hollow profiles such as 'O' sections, 'D' sections, 'U' channels, etc. The equivalent material type (CEM-C001) is also available as moulded components, sheets and flat gaskets. In either form gaskets or sheet material can be supplied with a self adhesive backing to assist installation / assembly.

Shielding Solutions Ltd  
410 Avenue West  
Skyline 120  
Great Notley  
Essex  
CM77 7AA

Tel: 01376 330033

Fax:01376 339163

Web: [www.shielding-solutions.com](http://www.shielding-solutions.com)

SSL/TDS/130 ISS 2  
21/08/2013