

**CEM-CS001 ELECTRICALLY CONDUCTIVE CARBON  
FILLED SILICONE ELASTOMER****Product overview**

CEM-CS001 is a semi conductive composite material comprising of silicone elastomer and carbon particles. It is formulated for the production of flat gaskets and custom mouldings that offer both EMI shielding and environmental sealing over a wide temperature range.

CEM-CS001 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 70 Shore A |
| Volume resistivity                  | <10 Ω.cm                             |
| Tensile strength                    | 7 MPa                                |
| Elongation                          | 180%                                 |
| Compression set – 72 hours at 100°C | <40%                                 |
| Service temperature range           | -40°C to 200°C                       |

**CEM-CS001 ELECTRICALLY CONDUCTIVE CARBON  
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|                    |      |
|--------------------|------|
| 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 as die cut flat gaskets, sheet, strips and custom moulded components. The equivalent material type is also available in the form of extruded sections (CEE-CS001). Gaskets and sheet material can be supplied with a self adhesive backing to assist installation / assembly.

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