SPRINGMESH™ Highly Resilient EMI Mesh Gasket

SPRINGMESH™ knitted wire mesh technology offers the advantages of a mesh over elastomer core without the bulk or expense of a core. This knitted wire technique results in a highly resilient EMI gasket, capable of being compressed over 75% with remarkable recovery. The gasket offers a shielding effectiveness similar to that of a conductive elastomer in a groove-mounting application (Figure 1).

Another key feature of SPRINGMESH gaskets is the ability to achieve high deflection under low compressive loading forces (see Figures 2 and 3). Compression set is less than 30% after being deflected as much as 80%. Electrical contact resistance is extremely low, even at low deflection (see Figure 4). SPRINGMESH gaskets are especially suited for applications in die cast commercial electronic housings, such as CATV passive device boxes, which require high levels of shielding at low cost. Compared to stainless steel mesh gaskets, they are far more electrically conductive and offer up to 40 dB more shielding effectiveness. Spring properties are comparable to those of beryllium copper mesh gaskets.

FEATURES
- Compression set of less than 30% when compressed up to 80% of original diameter
- Tin-plated-steel wire
- Hollow knitted wire design
- Contains no beryllium
- Deflection of up to 80% is possible
- Low closure force produces high deflection

BENEFITS
- Economical
- High resiliency
- Excellent shielding properties
- Electrically stable over time
- Available in bulk or cut-to-length parts
- Terminated cut-to-length ends eliminates fraying or loose particles

APPLICATIONS
SPRINGMESH EMI gasket is supplied in a round configuration and is best designed as a gasket-in-a-groove. Typical applications include:
- Cast CATV device housings (with outboard environmental seals)
- NEMA enclosures
- Industrial enclosures

DESIGN FEATURES
SPRINGMESH EMI gasket is made from 0.004 in. (0.11 mm) diameter tin-plated-steel wire. The standard construction is a double layer of wire mesh formed into a hollow cylinder. Single layer construction is available on a custom basis, but two layers is the preferred design for optimum EMI shielding and compression-deflection performance.
- Tin-plated-steel wire to AISI/SAE
- Standard diameters from 0.093 in. (2.36 mm) to 0.375 in. (9.525 mm) available. Contact Chomerics for custom sizes.

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