SOFT-SHIELD® 5000 Series Conductive Jacket over Foam EMI Gaskets continued

TYPICAL CROSS SECTION TOLERANCES:

±0.010 in. (0.25 mm) for all dimensions up to 0.04 in. (1.02 mm)
±0.020 in. (0.51 mm) for all dimensions above 0.04 in. (1.02 mm)

Detailed part drawings are available on request.

TYPICAL LENGTH TOLERANCES:

0.10 to 6.0 in. (0.25 to 15.2 cm) ± 0.030 in. (0.76 mm)
6.1 to 18.0 in. (15.5 to 45.7 cm) ± 0.060 in. (1.52 mm)
18.1 to 42.0 in. (46.0 to 106.7 cm) ± 0.075 in. (1.91 mm)
42.1 to 96.0 in. (107.0 to 243.8 cm) ± 0.090 in. (2.29 mm)

TYPICAL KISS-CUT TOLERANCES:

0.04 to 0.12 in. (1.02 to 3.05 mm) ± 0.015 in. (0.38 mm)
0.121 to 0.40 in. (3.07 to 10.16 mm) ± 0.035 in. (0.89 mm)

Inquiries are invited concerning other cross sections and sizes.

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TECHNICAL BULLETIN

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SOFT-SHIELD® 5000 Series
Conductive Jacket over Foam Low Closure Force EMI Gaskets

DESCRIPTION

SOFT-SHIELD 5000 Series EMI gaskets are designed to meet the stringent shielding and mechanical performance requirements of today’s commercial electronic enclosures, medical electronics, factory automation equipment, reprographics and grounding applications. A growing number of standard profiles and sizes provide flexibility when selecting a gasket for a specific application. Custom profiles or sizes can also be produced. Each SOFT-SHIELD 5000 Series gasket consists of an electrically conductive fabric jacket over a highly compressible urethane foam core. The nickel-plated, woven nylon rip-stop jacket is self-terminating when cut. Chosen for its excellent compressibility, the foam core typically requires less than 1 lb/in (0.175 N/mm) closure force, making it especially useful for thin-walled plastic enclosures. Standard pressure-sensitive adhesive kiss-cutment tape (PSA) makes SOFT-SHIELD 5000 Series gaskets a user-friendly and cost-effective design solution.

Every profile in the SOFT-SHIELD 5000 Series can be provided in a General Duty version or a UL 94V-0 rated version, as needed, with no difference in performance.

FEATURES

• Choice of General Duty or UL 94V-0 rated versions
• Typically require <1 lb/in (0.175 N/mm) closure force – 5 times lower than other gaskets
• >90 dB attenuation from 20 MHz to 10 GHz
• Asymmetrical profiles, as well as “C”, “V”, “P”, “D” shapes
• No performance degradation after 10,000 compression cycles
• Wide release liner for easy removal
• Kiss-cut parts on release sheets for easy “peel-and-stick” grounding applications
• Self-terminating jacket – no sharp edges
• Tested to Belcore GR-64-Core Airborne Contaminants requirements
• Custom lengths, custom profiles

BENEFITS

• Cost-effective
• Alternative to BeCu fingerstock
• Pick and place installation
• Technical application support
• Global distribution/fabricator network
• Application-ready custom parts (die-cut, spliced, etc.)

Gaskets are supplied as strips or kiss-cut parts on film release backers, or individual pre-cut pieces. Pressure-sensitive adhesive is standard. Single-piece picture frame gaskets also can be fabricated from continuous lengths, incorporating integral pre-cut notches for fasteners. (See page 2.)

APPLICATIONS

Applications include:

• Shielded vents and windows
• Cable shielding products
• EMI/ESD shielding laminates
• Low closure force, foam core EMI gaskets
• Conductive coatings, sealants, adhesives
• Cable shielding products
• EMI/ESD shielding laminates
• Shielded vents and windows

CHOMERICS’ APPLICATIONS ENGINEERING DEPARTMENT WELCOMES THE OPPORTUNITY TO PROVIDE ASSISTANCE WITH DESIGN AND PROTOTYPE FABRICATION OF SOFT-SHIELD 5000 SERIES EMI GASKETS IN CUSTOM PROFILES.

NOTES:

This information is intended to be the best of our knowledge true and accurate. However, since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented without warranty or responsibility on our part and should make their own tests to determine the suitability of our products in any specific situation. This product is sold without warranty either expressed or implied, of fitness for a particular purpose or otherwise, except that this product shall be of standard quality, and except to the extent otherwise stated on Chomerics’ invoice, quotation, or order acknowledgement.

With an extensive choice of profiles and sizes, SOFT-SHIELD Gaskets are supplied as strips or kiss-cut parts on film release backers, or individual pre-cut pieces. Pressure-sensitive adhesive is standard. Single-piece picture frame gaskets also can be fabricated from continuous lengths, incorporating integral pre-cut notches for fasteners. (See page 2.)

Packaging:

Gaskets are supplied in standard 8-foot lengths or cut-to-length strips. Depending on the profile, gasketing can also be supplied on spools. For rapid peel-and-stick grounding applications, the material is supplied as kiss-cut parts on polyester film release backers, or as individual pieces.

Chomerics also fabricates single-piece, spliced picture frame gaskets from continuous lengths. With their fully jacketed surfaces, these gaskets are ideally suited for low closure force applications that require 360° EMI shielding, or the ease of installing a one-piece gasket (see next page).

Chomerics’ Applications Engineering department welcomes the opportunity to provide assistance with design and prototype fabrication of SOFT-SHIELD 5000 Series EMI Gaskets in custom profiles.