C-RAM SS

TECHNICAL BULLETIN 320-7

FREQUENCY-TUNED SALISBURY SCREEN ABSORBER

C-RAM SS is a thin, very lightweight, frequency tuned absorber which provides high absorption at specific frequencies.

C-RAM SS is a Salisbury Screen type absorber which is made from a conductive front layer, a dielectric core (or spacer) and a reflective back layer.

The dielectric core is a closed cell polyethylene foam of low loss and low dielectric constant. A reflective aluminum foil back layer is bonded to this core. The front layer is a fiberglass cloth with a lossy coating, it is bonded to the dielectric spacer. This construction provides high tear strength, good abrasion resistance and light weight.

C-RAM SS is readily cut to size with scissors or a band saw. It is well suited to reducing reflections from nearby objects, increasing isolation between adjacent antennas and reducing energy levels of antenna sidelobes.

TYPICAL PROPERTIES

Reflectivity: -20 dB at design frequency
Service temperature: -70 to +180°F
Power handling: 3 W/ft.²
Standard size: 24 in. x 24 in.
(Other sizes available)

C-RAM SS is available for frequencies from 1 GHz through 12 GHz. High frequency versions can be fabricated on request.

<table>
<thead>
<tr>
<th>Band</th>
<th>Nom. Thk.</th>
<th>Nom. Weight</th>
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</thead>
<tbody>
<tr>
<td>2-4 GHz</td>
<td>1.0 to 0.5 in.</td>
<td>0.24 lbs/ft.²</td>
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<tr>
<td>4-8 GHz</td>
<td>0.5 to 0.25 in.</td>
<td>0.20 lbs/ft.²</td>
</tr>
<tr>
<td>8-12 GHz</td>
<td>0.25 to 0.10 in.</td>
<td>0.15 lbs/ft.²</td>
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