

CUMING MICROWAVE

Technical Bulletin 310-2

**RoHS
Compliant**

C-RAM FLX-800

FLEXIBLE MAGNETIC SHEET ABSORBER FOR 800-900 MHz CELLULAR BAND

C-RAM FLX-800 is a magnetically lossy silicone rubber sheet material. When backed with an electrically conductive surface, it will act as a reflectivity reduction layer, resonant at around 850 MHz (see graph).

Because of its large ferromagnetic loss in the UHF region, it can be used to line one or more walls of a cavity to attenuate modal resonances. This is useful for enclosed devices, as well as for small chambers used to test device emissions.

C-RAM FLX-800 can be custom designed for reflectivity reduction resonances at other UHF frequencies. For applications having limited clearance, or having weight restrictions, C-RAM FDSS and FDSU should be considered. These are flexible sheet materials made of the same silicone or urethane rubber, having the same magnetically lossy loading. These materials are available in thicknesses of 0.8 -6.4 mm (.030 - .250 in.), and provide some resonance damping ability traded off against reduced weight.

For applications not exceeding temperatures of 120 °C (250 °F), C-RAM FLX-U-800, an equivalent urethane rubber material, can be used.

TYPICAL PROPERTIES

Color: Grey

Thickness: 8.1 mm (0.32 in.)

Weight: 24.9 kg/m² (5.1 lb/ft²)

Reflectivity Performance: <-20 dB at 850 MHz
and <-15 dB in 800-900 MHz band.

Hardness, Shore D: 30

METHOD OF APPLICATION

C-RAM FLX-800 is a soft, flexible silicone based material, and can readily be cut to shape with a razor knife or bandsaw, and can be drilled on a drill press. Because of its thickness, tight tolerance cuts should be made with a die, or by means of a laser cut. C-RAM FLX-U-800 is a slightly harder material, but can be processed in the same way.

C-RAM FLX-800 can be bonded to many substrates using an RTV silicone adhesive. FLX-U-800 can be bonded with epoxy adhesives, such as C-BOND 245. For ease of application, both grades can be supplied with a peel-and-stick pressure sensitive adhesive, simplifying your assembly. Large sections of the absorber can be mechanically fastened to the substrate using plastic bolts.

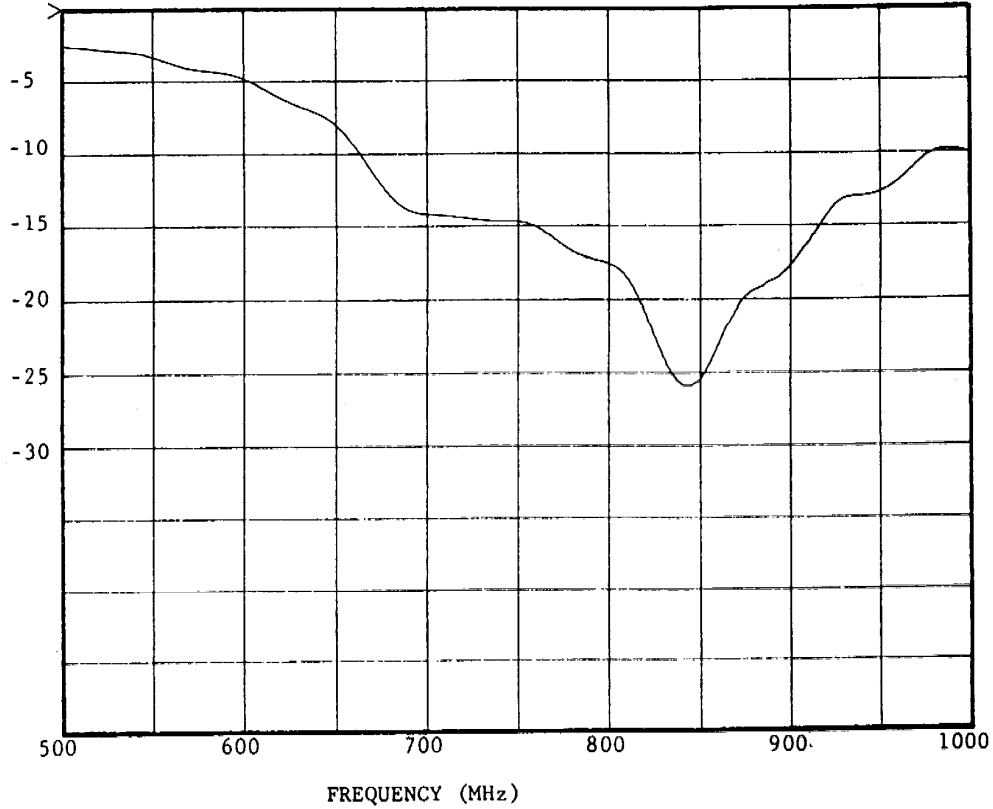
AVAILABILITY

Standard product size is a flat sheet, 300 x 300 mm (12 x 12 in.) or 400 x 500 mm (16 x 20 in.). Custom sizes are also available; we can also die-cut or laser-cut parts to your drawings.

C-RAM FLX-800 can also be supplied with a conductive metal backing and/or with a peel and stick pressure sensitive adhesive.

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TYPICAL REFLECTIVITY CURVE OF C-RAM FLX-800 COMPARED TO FLAT METAL PLATE



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