



CUMING MICROWAVE

C-RAM DSL

RoHS
Compliant

TECHNICAL BULLETIN 310-8

HIGH LOSS SILICONE RUBBER FOAM STOCK

C-RAM DSL is a low density syntactic foam silicone rubber with dielectric fillers which are lossy at microwave frequencies. It is useful as a radar absorber or insertion loss material. It is waterproof, weatherproof, and has good high-temperature properties. It is electrically non-conductive, and is non-magnetic. As a syntactic foam, it has a low thermal conductivity.

C-RAM DSL can be used to terminate a transmission line, lower the Q of a cavity, suppress surface currents, reduce reflectivity, and seal joints of electrical equipment. It contains no salts or other ingredients which may promote corrosion. The soft syntactic foam rubber sheets are readily cut with a sharp knife. RTV silicone adhesive will bond C-RAM DSL to metal or plastic substrates.

This material is currently available in two versions, with properties described below. The standard size is a 12 x 12 inch (300 x 300 mm) sheet, with a thickness of 0.25 inches (6.3 mm). Other formulations are possible, and custom specifications are invited. The material is also manufactured as a tuned quarter-wave resonant absorber.

TYPICAL PROPERTIES

Color: Black
Service Temp.: -60 to +350 °F
Density: 0.9 g/cm³
Volume resistivity: 10¹²
Dielectric strength: 300 v/mil
Attenuation at 10 GHz:
 DSL-15 15 dB/inch
 DSL-50 50 dB/inch

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