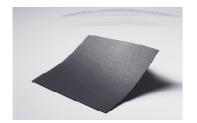


## Eccosorb® MCS-U

## High-Loss, Thin, Elastomeric Microwave Absorber



Eccosorb MCS-U is a thin, flexible, high-loss, magnetically loaded, electrically non-conductive, urethane based absorber. It is designed for the frequency range from 800 MHz to 18 GHz. The main advantage of the polyurethane version is its ease of bonding to various substrates.



#### **FEATURES AND BENEFITS**

- High mechanical strength
- Excellent abrasion resistance
- Silicone free

#### **MARKETS**

- Commercial Telecom
- Automotive and Industrial Electronics

#### **SPECIFICATIONS**

TYPICAL PROPERTIES	ECCOSORB MCS-U
Frequency Range	0.8 to 18 Ghz
Service Temperature °C (°F)	-40 to 120 (-40 to 248)
Hardness Shore A	96
Elongation %	11
Tensile Strength MPa	2.8
Volume Resistivity (Ohm-cm)	2x10 <sup>8</sup>

Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.

#### **APPLICATIONS**

- When placed within a cavity Eccosorb MCS-U has proven to be very effective at dampening resonances due to the absorbers high permittivity and permeability as well as high loss values, which in turn reduces the overall VSWR.
- It is designed for the suppression of surface currents over a wide range of frequencies and can be used for the suppression of creeping waves and reduction of cavity resonances in microwave modules as well as minimizing stray radiation in power amplifiers, oscillators and LNB's.

#### **AVAILABILITY**

- Standard sheets are 305 mm x 305 mm (12"x12").
- Standard thickness is 1 mm (.040")
- It can be supplied with a pressure sensitive adhesive ( –SA suffix stands for Self-Adhesive ).
- Eccosorb MCS-U is also available in other sizes, thicknesses and customer specified configurations upon request. This includes die cut and kiss cut parts to reduce installation labor by allowing quick assembly.

Americas: +1.866.928.8181 Europe: +49.(0)8031.2460.0 Asia: +86.755.2714.1166



# Eccosorb® MCS-U

#### **INSTRUCTIONS FOR USE**

- Eccosorb MCS-U is designed to function directly in front of a metallic surface. If this is not the case, a metallic foil should first be bonded to the object.
- To obtain a strong bond of the absorber to the object, the metallic surface should first be thoroughly cleaned with a degreasing solvent. Epoxy and acrylic adhesives are recommended or use the self-adhesive version.
- Eccosorb MCS-U can be readily cut with a sharp knife and template. It is a very flexible material and will conform to contoured surfaces.

### **Typical attenuation Eccosorb MCS-U**

