# ECCOSORB® MCS-U

THIN, FLEXIBLE, BROADBAND, MICROWAVE ABSORBER

### **Description:**

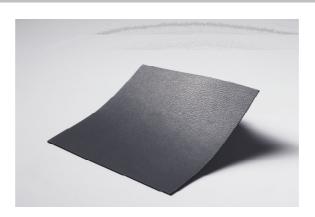
Eccosorb MCS-U is a thin, flexible, highloss, magnetically loaded, electrically nonconductive broadband, urethane based absorber

It is designed for the frequency range from 800 MHz to 18 GHz.

The main advantages of the polyurethane version are its ease of bonding to various substrates and the availability of a self-adhesive version.

Further they offer high mechanical strength and excellent abrasion resistance.

Will withstand temperatures from -40°C to 120°C.



### Application:

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.

### **Physical Properties:**

Colour	grey
Dimensions ( mm )	305 x 305
Nominal thickness (mm)	1
Weight (kg/m²)	4.3
Tensile strength (Mpa)	2.8
Elongation (%)	11
Volume Resistivity (Ohm-cm)	2x10 <sup>8</sup>
Hardness (Shore A)	96

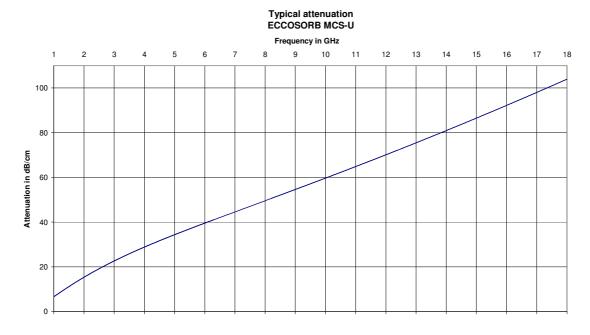
Emerson & Cuming Microwave Products N.V.
Bell Telephonelaan 2B – B-2440 Geel – Belgium
Tel: +32 14 56 25 00 – Fax +32 14 56 25 01
Geel.Sales@lairdtech.com - www.eccosorb.eu



# ECCOSORB® MCS-U

THIN, FLEXIBLE, BROADBAND, MICROWAVE ABSORBER

### **Electromagnetic Properties:**



#### Availability:

Eccosorb MCS-U is available in square sheets of 305X305mm, standard thickness is 1mm. It can be supplied with a pressure sensitive adhesive designated as Eccosorb MCS-U-SA, where the –SA

suffix stands for Self Adhesive.

On special order other sizes, thicknesses and customer specified configurations can be supplied. This includes die cut and kiss cut parts to reduce installation labour by allowing quick assembly.

#### 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.

As it is a homogeneous material, there is no distinction between its front and back face.

To obtain a strong bond of the absorber to the object, the metallic surface should be first 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 mild curvatures.



Safety Considerations: It is recommended to consult the EMERSON & CUMING MICROWAVE PRODUCTS product literature, including material safety data sheets, prior to use EMERSON & CUMING MICROWAVE PRODUCTS products. These may be obtained from your local sales office. WARRANTY: Values shown are based on testing of laboratory test specimens and represent data that falls within the normal range of properties of the material. These values are not intended for use in establishing maximum, minimum or ranges of values for specification purposes. Any determination of the suitability of the material or any use contemplated by the user and the manner of sure use is the sole responsibility of the user who must assure that the material as subsequently processed meets the needs of this particular product or use. We hope the information given here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and veriety action but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale INCLUDING THOSE LIMITING WARRANTIES AND REMEDIES which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions nor do we intend them as a recommendation for any use which would infringe any patent or copyright.

2014(07 - V01/14 Microwave Products N.V., Bell Telephonelaan, 2B, B-2440 Geel, Belgium.
ECCOSORB, ECCOSTOCK, ECCOSHIELD, ECCOLENS, ECCOPAD are registered trademarks of EMERSON & CUMING MICROWAVE PRODUCTS N.V