

# ECCOSORB® GDS-U

BROADBAND, HIGH-LOSS, MICROWAVE ABSORBER

## Description:

Eccosorb GDS-U is a thin, flexible, high-loss, magnetically loaded, electrically non-conductive, broadband urethane absorber. It is designed for the frequency range from 6 GHz and above.

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

Furthermore it offers high mechanical strength and excellent abrasion resistance. Eccosorb GDS-U will withstand temperatures from -40°C to 120°C.

## Application:

When placed within a cavity, Eccosorb GDS-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 will significantly improve the operation of microwave devices by absorbing stray microwave radiation.

Eccosorb GDS-U will reduce the reflections from metal structures through the absorption of surface currents. Applications include power amplifiers, oscillators, down/up converters and LNB's. It is also utilized to modify antenna patterns, cover antenna feed supports, line antenna caps to reduce reflections and improve the isolation of sensitive RF devices.

Although not intended as a specular absorber, it will reduce metal plate reflectivity by a few dB.

## Physical Properties:

Colour	grey
Dimensions ( mm )	305 x 305
Nominal thickness (mm)	0.76
Weight (kg/m <sup>2</sup> )	2.6
Specific gravity	3.5
Volume Resistivity (Ohm-cm)	>10 <sup>11</sup>
Hardness (Shore A)	86



**ELECTRONIC  
SERVICE GmbH**

Hohe Straße 3 | 61231 Bad Nauheim  
T +49 (0)6032 9636-0 | F +49 (0)6032 9636-49  
info@electronic-service.de | www.electronic-service.de

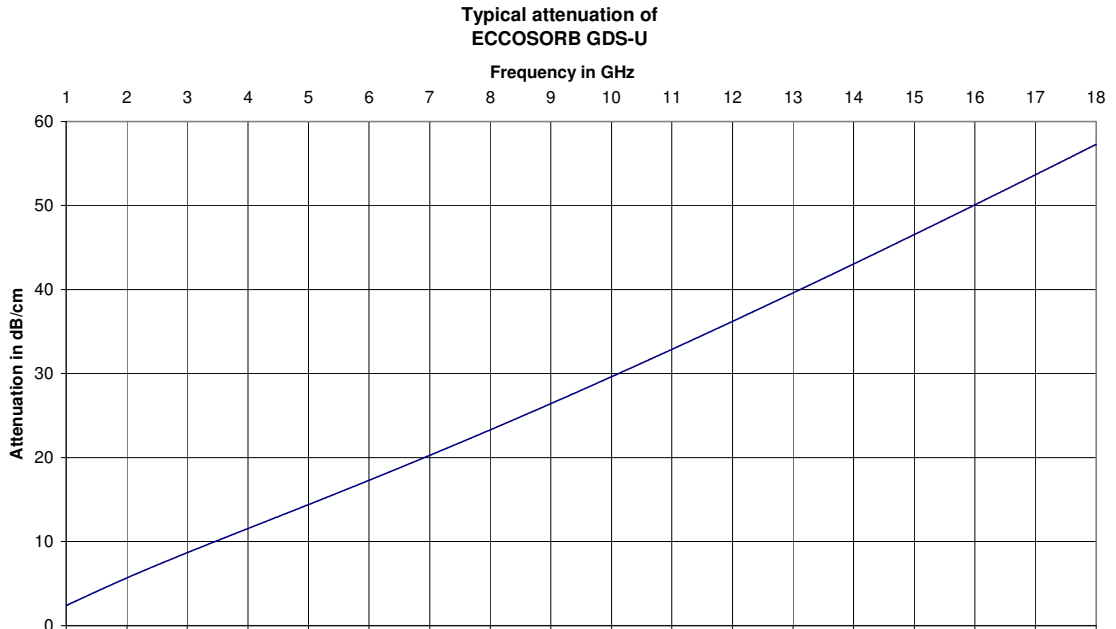
**Emerson & Cuming Microwave Products N.V.**  
Bell Telephonaan 2B – B-2440 Geel – Belgium  
Tel: +32 14 56 25 00 – Fax +32 14 56 25 01  
sales@eu.eccosorb.com - www.eccosorb.eu



# ECCOSORB® GDS-U

BROADBAND, HIGH-LOSS, MICROWAVE ABSORBER

## Electromagnetic Properties:



## Availability:

Eccosorb GDS-U is available in square sheets of 305X305X0.76mm. It can be supplied with a pressure sensitive adhesive designated as Eccosorb GDS-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 GDS-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 GDS-U can be readily cut with a sharp knife and template.



**ELECTRONIC  
SERVICE GmbH**

Hohe Straße 3 | 61231 Bad Nauheim  
T +49 (0)6032 9636-0 | F +49 (0)6032 9636-49  
info@electronic-service.de | www.electronic-service.de

**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 such 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 verification 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.

2011/04 - V01/2

Emerson & Cuming Microwave Products N.V., Bell Telephonaan 2B, B-2440 Geel, Belgium.

ECCOSORB, ECCOSTOCK, ECCOSHIELD, ECCOLENS, ECCOPAD are registered trademarks of EMERSON & CUMING MICROWAVE PRODUCTS N.V.

