

## High-Loss, Thin, Elastomeric Microwave Absorber

#### **HIGH-LOSS ELASTOMERIC ABSORBER**

Eccosorb GDS is a thin ,flexible, high-loss, magnetically loaded, electrically non-conductive silicone rubber sheet. It is designed for the frequency range from 18 GHz and above. The material is impervious to moisture and can be subjected to high altitudes, with no adverse effects. Being a silicone based absorber, it has low outgassing properties for space applications.

#### **FEATURES AND BENEFITS**

- High power performance
- Low outgassing properties

#### MARKETS

- Commercial Telecom
- Security and Defense
- Automotive and Industrial Electronics

Eccosorb<sup>®</sup> GDS

#### **SPECIFICATIONS**

TYPICAL PROPERTIES	ECCOSORB GDS
Frequency Range (GHz)	≥ 18 GHz
Max Service Temperature °C (°F)	170 ( 338)
Hardness (Shore A)	>70
Volume Resistivity (ohm-cm)	> 10 <sup>11</sup>
Weight kg/m² (lbs/ft²)	2.9 (0.6)
Outgassing	
(%TML) (%CVCM)*	0.2/0.08

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

\* Outgassing data per ASTM E595-07; criteria for acceptability is 1.00% TML and 0.10% CVCM.

### **APPLICATIONS**

- When placed within a cavity Eccosorb GDS has proven to be very effective at dampening resonances due to the absorbers high permittivity and permeability.
- When bonded to a metal surface Eccosorb GDS will significantly reduce the reflectivity of metal objects or structures due to the flow of microwave currents on that surface.
- It can be applied to antenna elements, microwave dishes, the inner or outer surfaces of waveguides for isolation, attenuation or modification of radiating patterns.
- When applied to side or even rear surfaces of certain objects Eccosorb GDS will cause a significant reduction in "head on" reflectivity or backscattering.
- Although not intended as a specular absorber, it will reduce metal plate reflectivity by a few dB.

#### **AVAILABILITY**

- Standard sheets are 305 x 305x0.76mm (12"x12"x0.030")
- Eccosorb GDS can be supplied with a Pressure Sensitive Adhesive.
- On special order, other sizes, thicknesses and customer specified configurations can be supplied.

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

www.lairdtech.com



# **Eccosorb® GDS**

### **INSTRUCTIONS FOR USE**

- Eccosorb GDS is designed to function directly in front of a metallic surface.
- The material can be bonded by use of an RTV silicone based adhesive in conjunction with a suitable primer.
- To obtain a strong bond, the metallic surface should first be thoroughly cleaned with a degreasing solvent, apply a thin coat of primer to the dried surface and apply a RTV silicone adhesive.
- Eccosorb GDS can be readily cut with a sharp knife and template. It is a very flexible material and conforms to contoured surfaces.

**Typical Attenuation Eccosorb GDS** 



#### RFP-DS-GDS 111620

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user. Laird Technologies makers no warranties as to the fitness, merchantability, suitability or non- infringement of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. Il Laird Technologies products are sold pursuant to the Laird Technologies from sand Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2015 Laird Technologies, nc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies on and ther marks or registered trademarks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.