

THIN FLEXIBLE BROADBAND ABSORBER



Eccosorb FGM-U-125 is a thin, flexible urethane absorber. It is effective in reducing specular reflections as well as surface currents in cavity resonance applications. 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. It will withstand temperatures from -40°C to 120°C.

FEATURES AND BENEFITS

- High mechanical strength
- Excellent abrasion resistance

MARKETS

- Commercial Telecom
- Security and Defense

SPECIFICATIONS

TYPICAL PROPERTIES	ECCOSORB FGM-U-125
Frequency Range (GHz)	2 - 12
Temperature Resistance °C (°F)	-40 to 120 (-40 to 248)
Hardness (Shore A)	91
Weight (kg/m ²)	10.6

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

APPLICATIONS

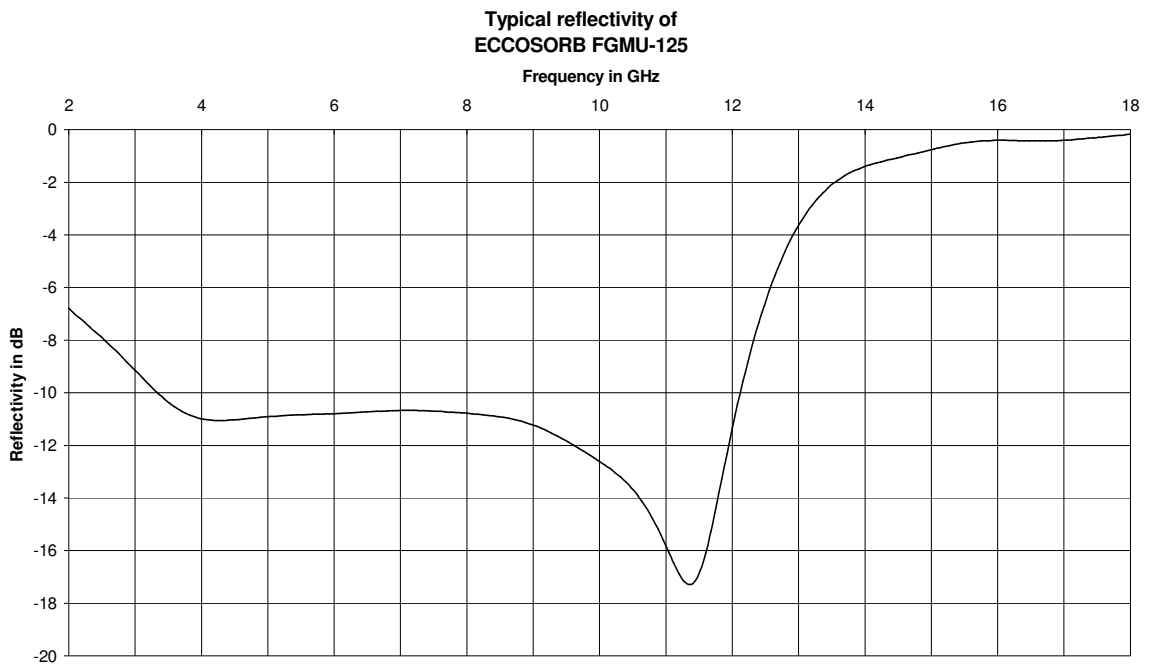
- Eccosorb FGM-U-125 is used to line cavities in which antennas operate. It may be applied to surfaces to improve radar performance, reduce radar cross section or backscattering.
- It is effective in reducing specular reflections as well as surface currents due to the high magnetic loss properties.
- When bonded to a metal surface, Eccosorb FGM-U-125 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.
- 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.

AVAILABILITY

- Standard sheets are 305 x 305mm (12"x12").
- Standard (nominal) thickness is 3.3mm
- The product is also available in other sizes and customer specified configurations upon request.

INSTRUCTIONS FOR USE

- Eccosorb FGM-U-125 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.
- Recommended is to use the self-adhesive version on smaller parts only as the weight of a full sheet will not be supported by the self-adhesive tape.
- It can be readily cut with a sharp knife and template.
It is a very flexible material and conforms to contoured surfaces.



RFP-DS-FGMU-125 121415

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