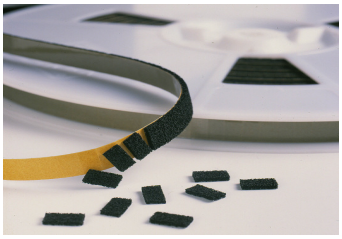
Eccosorb® LS

Lossy, Flexible, Foam Microwave Absorber



LOSSY, FLEXIBLE FOAM ABSORBER

Eccosorb LS is the most widely known, used, and recommended polyurethane foam absorber. Eccosorb LS obtains its microwave properties via impregnation with a carbon black dispersion and is therefore electrically conductive. It is a very low cost solution for many applications over the thinner, more expensive rubber absorbers.

FEATURES AND BENEFITS

- Flexible, foam material
- High loss, low density
- Very low cost

MARKETS

- Commercial Telecom
- Test Boxes
- Security and Defense

SPECIFICATIONS

TYPICAL PROPERTIES	ECCOSORB LS
Max. Service Temperature °C (°F)	90 (194)
Frequency Range	≥ 1 GHz

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

	Attenuation (dB/cm)		Relative Impedance ($\|Z\|/Z_0$)	
	3 GHz	**10 GHz**	**3 GHz**	**10 GHz**
LS-14	1.0	1.7	0.83	0.89
LS-16	1.5	2.3	0.78	0.87
LS-18	3.2	4.7	0.69	0.82
LS-20	4.2	7.0	0.61	0.78
LS-22	7.4	14.9	0.55	0.74
LS-24	11	24	0.25	0.44
LS-26	16	34	0.18	0.31
LS-28	20	40	0.16	0.27
LS-30	24	46	0.13	0.22

APPLICATIONS

- Eccosorb LS is used to lower cavity Q's in RF amplifiers, oscillators, cabinets containing microwave devices, computer housings, LNB's and isolation of antennas by insertion loss.
- Eccosorb LS is also used to reduce surface currents on radiating elements and outer ground-plane type surfaces.
- Reflectivity of an object (metal or otherwise) can be reduced somewhat by applying one or more layers of Eccosorb LS to its surface.

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AVAILABILITY

- Standard sheets are 610mm x 610mm (24”x24”).
- Standard thicknesses are 3.2 mm (1/8”), 6.4 mm (1/4”), 9.5 mm (3/8”), 12.7 mm (1/2”), 19.1 mm (3/4”).
- All Eccosorb LS types can be delivered in special sizes or customer specified configurations upon request. This includes die-cut and kiss cut parts to reduce installation labor by allowing quick assembly.
- Usually Eccosorb LS is supplied with a pressure sensitive adhesive.
- Upon special request, Eccosorb LS can be supplied with an anti-dust coating to prevent carbon fallout.
- It can also be supplied, upon request, with a coating to prevent moisture uptake in high humidity to moderately wet environments.

INSTRUCTIONS FOR USE

- For optimal performance, Eccosorb LS should be bonded to a metallic surface.
- To obtain a strong bond, the surface should be thoroughly cleaned with a degreasing solvent.
- It can be securely bonded to itself or to other materials such as metal, wood and common plastic composites. Our specific Eccostock® foam adhesive is recommended or the self-adhesive version can be used.
- The material can be easily cut with a sharp knife, scissors or die.