Eccosorb® JCS

High Loss, Low Density, Flexible Silicone Rubber Sheet

FLEXIBLE ABSORBER SILICONE RUBBER SHEET

Eccosorb JCS is a silicone rubber sheet. It exhibits microwave properties and is electrically conductive. Eccosorb JCS is waterproof and has excellent thermal characteristics, tolerating high and low temperatures. Material does not flake or shed. Complex shapes are best cut with a water jet system.

It can be both used as cavity resonance and free space application at high frequencies

FEATURES AND BENEFITS

- High loss
- Low density
- Very flexible
- Dust free
- High frequency applications

MARKETS

- Automotive
- Telecom
- Industrial

SPECIFICATIONS

TYPICAL PROPERTIES	ECCOSORB JCS
Frequency range	35 – 100 GHz
Service Temperature °C (°F)	-70 to 177 (-94 to 350)
Thickness	0.50 mm - 3.18mm (0.020”-0.125’’)
Color	Black

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

ELECTRICAL PROPERTIES

Eccosorb JCS is a pure dielectric absorber with no magnetic properties (permeability = 1). The complex permittivity varies with frequency, see graphs below. Attenuation is a figure of merit for the lossiness of absorbent material and should not be used to directly estimate insertion loss.

Insertion loss is defined as the reduction in energy between point A and point B caused by the insertion of a material. In general, insertion loss is a function of the material electromagnetic parameters and the thickness. JCS can be custom tailored to many different insertion loss values.

	Attenuation (dB/cm)	
	3 GHz	**10 GHz**
JCS-3	2	3.5
JCS-5	4.5	9
JCS-7	8	16
JCS-9	10	20

USA: +1.866.928.8181

Europe: +49.8031.24600

Asia: +86.755.2714.1166

www.laird.com

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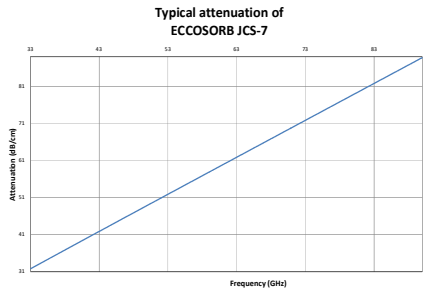
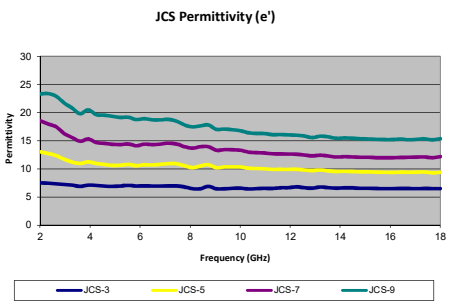
APPLICATIONS

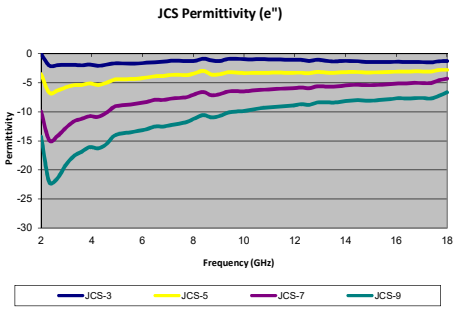
- Eccosorb JCS is used to lower cavity Q's in RF amplifiers, oscillators, cabinets containing microwave devices, computer housings, LNB's, and isolation of antennas by insertion loss.
- Eccosorb JCS is also used to reduce surface currents on radiating elements and outer ground-plane type surfaces.

AVAILABILITY

- Standard sheets are 30.5 cm x 30.5 cm (12''x12'')
- Standard thicknesses are 0.50 mm – 3.18 mm (0.20"-0.125") with the exception of JCS-9 which has a maximum thickness of 2.03 mm (0.08")
- Eccosorb JCS can also be supplied with a Pressure Sensitive Adhesive(PSA) Product designation 'ECCOSORB® JCS-X/SS6M'.
- Eccosorb JCS is available in other sizes and customer specified configurations upon request.







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