

C-RAM™ FF-2

High loss silicone rubber sheet absorber

Description

C-RAM™ FF-2 is a thin, flexible, ferrite filled silicone rubber sheet stock, which has high magnetic loss at UHF frequencies up to X-band.

C-RAM™ FF-2 is electrically non-conductive and it has a high dielectric strength.

C-RAM™ FF-2 has a high magnetic loss tangent from about 500 MHz to 10GHz. In the UHF range, C-RAM FDSS will perform in an equal fashion; it has different magnetic filler which exhibits high loss tangents at UHF frequencies, but C-RAM™ FF-2 should be used if absorption above 2 GHz is also desired.

Availability

Standard sheet size is 12" x 12" (305 mm x 305 mm). C-RAM™ FF-2 is available in thicknesses ranging from 0.010" up to 0.125".

C-RAM™ FF-2 can be supplied in other sizes, thickness or per customer specified configurations upon request.

C-RAM™ FF-2 can also be supplied with a peel-and-stick pressure sensitive adhesive backing, order as FF-2/PPGA.

As a standard, The C-RAM™ FF-2 base material is silicone, but it can also be supplied in a urethane base version.

Applications

C-RAM™ FF-2 can be used to lower the Q of cavities and dampening unwanted resonances and act as a transmission line attenuator.

C-RAM™ FF-2 can be applied to metal surfaces to attenuate RF surface currents.

C-RAM™ FF-2 can be used to modify antenna patterns.

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Method of application

C-RAM™ FF-2 can be cut with a sharp knife, die cut, waterjet cut, Kiss-cut. It is flexible and can be bonded to contoured surfaces.

C-RAM™ FF-2 can be applied to a substrate by using a silicone RTV adhesive. For best results, the material should be scuffed with sandpaper, wiped with alcohol to remove dust and grease, and have a silicone primer applied to the substrate.

C-RAM™ FF-2 can also be supplied with a pressure sensitive adhesive backing (/PPGA).

Typical properties

Frequency range	0.3 to 10 GHz
Color	Brown
Flammability	Non-flammable
Service temperature	-60 to +150 °C (-80 to +300 °F)
Standard thickness and weight	
1.0mm (.040")---	3.2kg/m ² (0.65 lb/ft ²)
2.0 mm (.080")---	6.3 kg/m ² (1.30 lb/ft ²)
Hardness, Shore A	80
Thermal conductivity	0.002 cal-cm/sec-cm ² -°C
Volume resistivity	>1011 ohm-cm
Dielectric strength	10 kv/mm (250 v/mil)

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