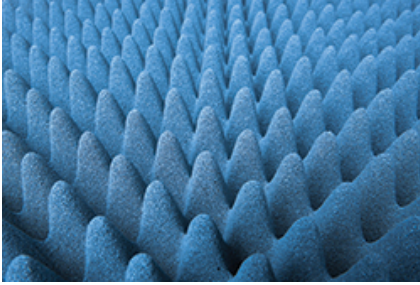


RF ABSORBERS Microwave Convoluted Absorber

ETS-Lindgren's EHP Convoluted Absorber is designed to provide good reflectivity performance with low forward scattering characteristics at incident angles up to 60° from normal incidence at microwave and millimeter-wave frequency ranges.



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The absorber's convoluted front surface creates a gradual transition from free-space to loaded substrate, for absorption of electromagnetic energy. The convoluted geometry gives this absorber good RF absorption performance at wide angles of incidence, while maintaining robust longevity.

Convoluted absorber is ideal for applications in treating antenna mechanical support structures, and/or metallic positioner devices as wrap-around absorber while testing antennas. It is also frequently used in small millimeter-wave anechoic chambers.

Key Features

- Non-Hygroscopic Substrate
- 1 GHz to 110 GHz Frequency Range
- RF Reflectivity Performance up to 60° from Normal Incidence
- 0.5 W/in² Power Handling Capability
- 90° C (190° F) Maximum Service Temperature
- Blunt Shaped Tips Minimize Breakage
- Fire Retardant
 - NRL 8093 Tests 1, 2 & 3
 - TI #2693066
 - MIT MS-8-21
 - UL 94
 - DIN 4102-B2

Features

Non-Hygroscopic Substrate

ETS-Lindgren absorbers use a new fire-retardant chemical formula that is non-hygroscopic. As a result, the absorber is not affected by moisture and will maintain its mechanical and RF performance over the life of the product. Broadband Performance CV Series absorber is designed to provide good RF attenuation of incident electro- magnetic wave from L-Band to W-Band frequency ranges.

Power Handling Capability

CV Series absorber can safely perform in environments that generate field strengths up to 200 V/m with operating temperatures up to 90° C (190° F).

Tested Performance

CV Series absorber is tested for reflectivity performance using the Naval Research Lab (NRL) broadband swept frequency arch method.

Fire Retardancy

CV Series absorber meets applicable US government and commercial flammability specifications as verified by an independent testing laboratory.

Specifications

Electrical Specifications

Frequency Range by Model

Model	Low Range Frequency	High Range Frequency
CV-02CL	6 to 18 GHz (Typical Absorption at Normal Incidence -20 dB)	18 GHz to 110 GHz (Typical Absorption at Normal Incidence <- 30 dB)
CV-03CL	4 to 18 GHz (Typical Absorption at Normal Incidence -25 dB)	18 GHz to 110 GHz (Typical Absorption at Normal Incidence <- 35 dB)
CV-04CL	2 to 18 GHz (Typical Absorption at Normal Incidence - 20 dB)	18 GHz to 110 GHz (Typical Absorption at Normal Incidence <- 35 dB)
CV-05CL	1 to 18 GHz (Typical Absorption at Normal Incidence -20 dB)	18 GHz to 110 GHz (Typical Absorption at Normal Incidence <- 35 dB)

Physical Specifications

Dimensions by Model

Model	Overall Height	Base Height	Pyramid Height	Pyramid Base Dimension
CV-02CL	5.1 cm (2.01 in)	1.3 cm (0.51 in)	3.8 cm (1.50 in)	61 cm x 61 cm (24 in x 24 in)
CV-03CL	7.6 cm (2.99 in)	2.5 cm (0.98 in)	5.1 cm (2.01 in)	61 cm x 61 cm (24 in x 24 in)
CV-04CL	10.2 cm (4.02 in)	2.5 cm (0.98 in)	7.6 cm (2.99 in)	61 cm x 61 cm (24 in x 24 in)
CV-05CL	12.7 cm (5.00 in)	2.5 cm (0.98 in)	10.2 cm (4.02 in)	61 cm x 61 cm (24 in x 24 in)