ABSORBER CONVEX™

MODEL CONVEX

- **Fire Retardant:**
  - **NRL 8093 Tests 1, 2 & 3**
  - **TI #2693066**
  - **MIT MS-8-21**
  - **UL 94**
  - **DIN 4102-B2**
- **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 (194° F) Maximum Service Temperature**
- **Uniquely Shaped Tips Minimize Breakage**

ETS-Lindgren's Convex Abosrber is designed to provide reflectivity performance of 35dB or greater and minizes low forward scattering characteristics at incident angles up to 60° or greater from normal incidence at microwave and millimeter-wave frequency ranges.

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

The convex absorbers feature rounded tips, reducing the likelihood of tip breakage. It 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 ideally suited for small millimeter-wave anechoic chambers.

Product 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 Convex Series absorber is designed to provide good RF attenuation of incident electromagnetic wave from L-Band to W-Band frequency ranges.

Power Handling Capability

Convex Series absorber can safely perform in environments that generate field strengths up to 540 V/m with operating temperatures up to 90° C (194° F).

Tested Performance

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

Fire Retardancy

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

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Electrical Specifications

Frequency Ranges	
CX-3CL	27dB @ 4 to 8 GHz; 35dB @ ≥ 8 Ghz
CX-5CL	25dB @ 2 to 4 GHz; 32dB @ 4 to 8 GHz; 35dB @ ≥ 8 Ghz

Physical Specifications

Model	Overall Height	Bass Height	Pyramid Height	Pyramid Base Dimension
CX-3CL	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)
CX-5CL	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)