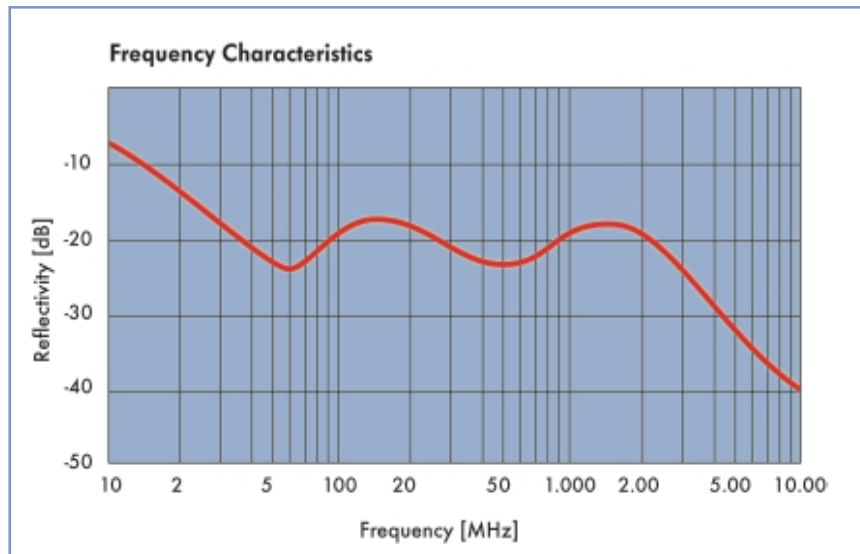


## Wide Band Cascade Absorber IP-045C

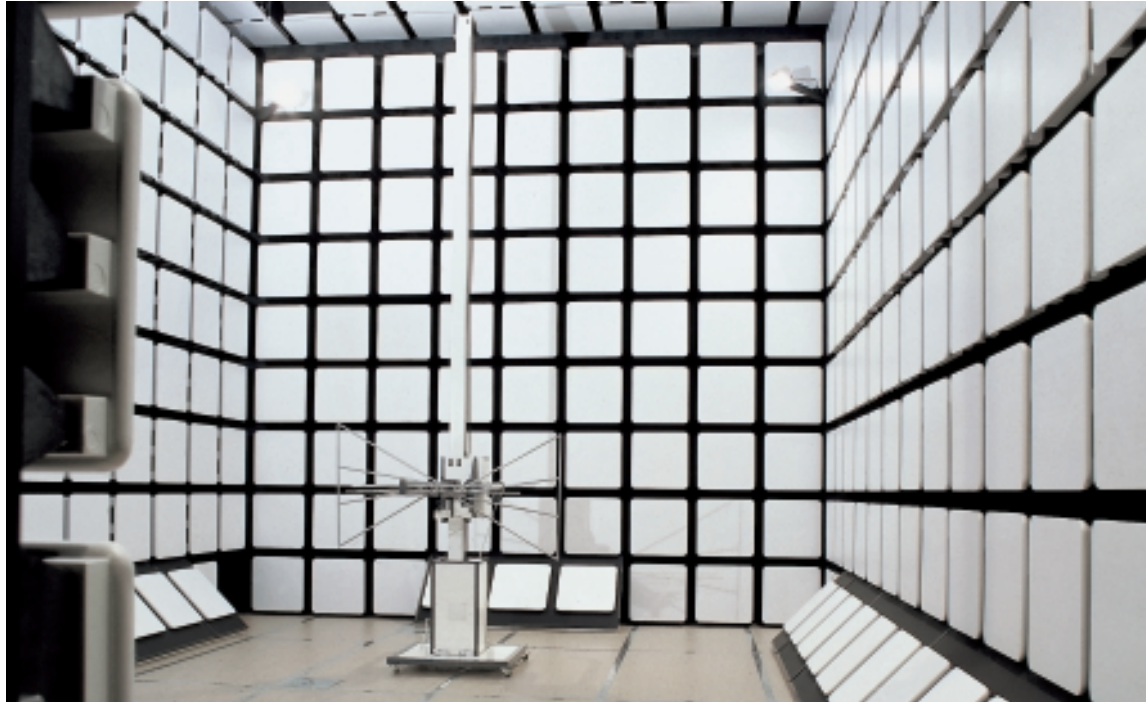
The TDK IP-045C cascade absorber is a high performance, ultra wide band absorber with an operating frequency of 30 MHz to 40 GHz. Small in size and lightweight but with high mechanical strength, it is the perfect absorber solution for higher frequency measurement applications in compact type and 3 meter/5 meter fully compliant anechoic chambers.

The IP-045C combines the magnetic resonance loss characteristics of TDK IB-011 ferrite tiles and dielectric board with a performance matched, wedge shaped styrofoam absorber (a concept invented by TDK). High absorption performance is achieved as TDK is the only absorber supplier who manufactures both ferrite tiles and resistive absorbers, ensuring exact impedance matching from design to manufacture.

The closed cell structure of the polystyrene produces an even and consistent carbon density throughout the absorber and enhances absorption performance. With a reflection attenuation of greater than 20dB, the IP-045C cascade absorber provides exceptional high absorption performance over the operating frequency range from 30 MHz to 40 GHz.



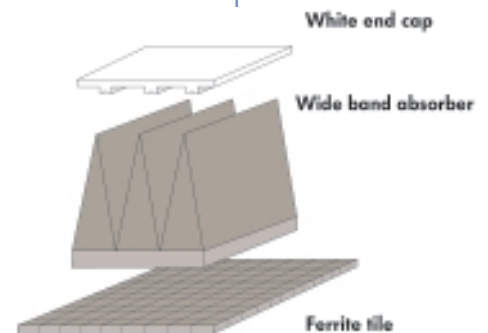
The IP-045C cascade absorber can be applied either as a fully lined or partly lined absorber to an existing TDK ferrite-only, compact or 3 meter, fully compliant anechoic chamber to extend the frequency range from 1,000 MHz to 40 GHz.



3 meter test range semi-anechoic chamber constructed by TDK utilizing **IP-045C** absorbers (fully-lined).

### Physical and Chemical Characteristics

Dimensions	600 mm x 600 mm x 450 mm (23.6" L x 23.6" W x 17.7" H)
Basic Composition	Closed cell styrofoam/ferrite tiles. Does not soil hands or clothes on contact.
Mechanical Strength	4 kg/cm <sup>2</sup> tensile strength. No damage to tips or tapers.
Humidity Resistance	No deterioration with water. No hydrolysis effect.
Chemical Stability	Not readily attacked by acids, alkalines and petroleum-based liquids.
Product Life	15 years
Fire Retardency Certification	NRL class 1, 2 and 3, UL 94 HBF, DIN 4102 class B



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