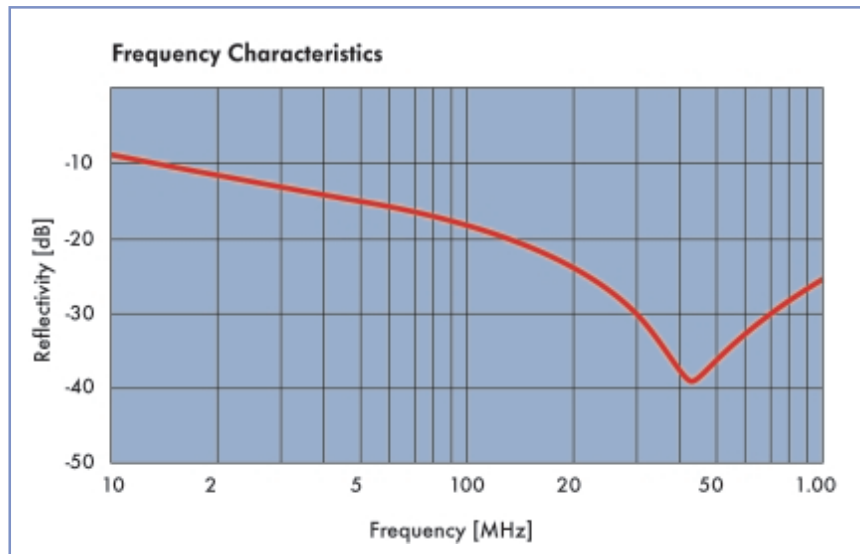


Ferrite Absorber X-131 & Dielectric

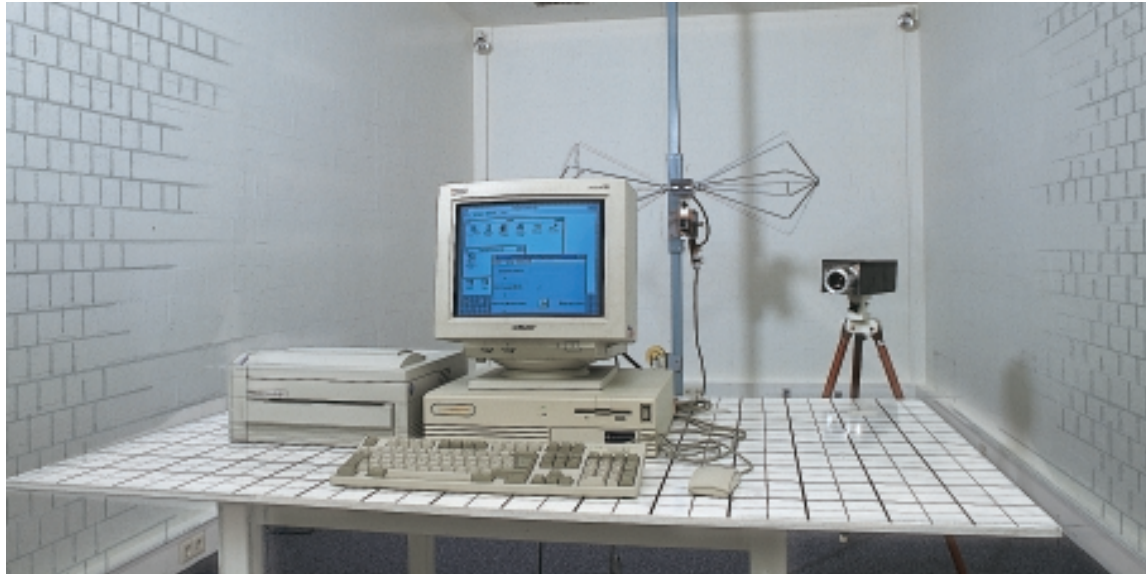
TDK, the world's largest supplier of ferrite material, ferrite products and EMC components, is the undisputed leader in ferrite tile and cascade radio wave absorber technology. TDK developed the concept of ferrite tile as EMC radio wave absorbers, and has over 20 years experience in constructing anechoic chambers with ferrite tiles.

The TDK double layer technique combines the magnetic resonance loss characteristics of TDK ferrite tile X-131 with a tuned dielectric material. Developed and patented by TDK, the double layer radio wave absorber offers better performance and extended frequency range than ferrite tiles by themselves or conventional urethane foam absorbers. This concept enabled TDK to develop and construct the world's first "ferrite only" lined, compact anechoic chamber compliant with IEC 1000-4-3.

The X-131 ferrite tile and dielectric layer is especially suitable for susceptibility and radiated immunity measurement, and provides exceptional absorption performance over the frequency range from 26 MHz to 1,000 MHz.



The X-131 ferrite tile and dielectric board absorber enabled TDK to introduce the world's first compact anechoic chamber (with dimensions of 7.0 m L x 3.0 m W x 3.0 m H) now adopted as the industry standard.



X-131 double layer, ferrite tile absorbers in a TDK CAC-S anechoic chamber (white painted finish is optional).

Physical and Chemical Characteristics

Dimensions	100 mm x 100 mm x 4.6 mm (4" L x 4" W x 0.2" H)
Density	4.9
Young's Modulus	1.8×10^{12} g/cm \cdot sec 2
Bending Strength	5.5×10^2 kg/m 2
Tensile Strength	45 kg/cm 2
Compression Hardness	2.4×10^3 kg/cm 2
Vickers Hardness	590
Wire Expansion Coefficient	6 to 10 x 10 $^{-6}$
Thermal Conductivity	1.5×10^{-2} cal/sec \cdot cm \cdot °C
Specific Heat	0.2 cal/g \cdot °C
Chemical Formula	MO, Fe $_2$ O $_3$ (M: Metal)

Main Hazards: No explosion, flammability, reactivity or health hazard.



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To learn more about TDK RF Solutions' wide range of innovative products and services visit www.tdkrfsolutions.com

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