

#### **UHF ferrite absorber tiles 3610**

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Our 3610 series Ferrite absorber tile is the industry standard solution and exhibits excellent overall performance
versus cost. It is an attractive alternative to traditional, large, foam-type absorber materials for new anechoic
chambers or for upgrading existing rooms for radiated emission and immunity measurements.

These tiles are a quite recent development. They are used when relatively high absorption is required together with a compact solution (up to -37 dB @  $800 \sim 900 \text{MHz}$ ). They also provide a reliable and compact solution for attenuating plane-wave reflections in shielded enclosures.

For the best economical choice, see our most common 3600 series VHF ferrite absorbers. These are the most frequently used choice for Anechoic chambers.

## 3610 UHF ferrite absorber tile

UHF ferrite absorber tile is made of a sintered ferrite in the shape of a square tile. The dimensions are  $100 \times 100 \text{ mm}$  or  $600 \times 600 \text{ mm}$  with a thickness of 4.0 mm.

The tiles can easily be screwed on to a wall individually, inserting screws through the 10mm hole, or mounted by means of adhesive. The tiles are optionally available in panel format. The tiles are surface-ground on all sides to precise mechanical tolerances, minimizing gaps between adjacent tiles to ensure maximum low-frequency performance.

The tiles provide excellent electromagnetic absorption in the UHF band. The product works well in a Dark box for mobile phone inspection and EMC anechoic chambers, and it is also suitable for high buildings to prevent TV ghost or for the absorption of RFID.

## **Material characteristics**

Characteristics	Symbols	Units	3610 series
Initial permeability	$\mu_{iac}$		100±20%
Relative loss factor	tanδ/μ <sub>iac</sub>	x10 <sup>-6</sup>	52 (1.0MHz)
Saturation flux density (1194 A/m)	$B_s$	mT	380
Remanence	B <sub>r</sub>	mT	300
Coercivity	H <sub>c</sub>	A/m	120
Relative temp. factor (20 °C ~ 60 °C)	$\alpha_{\mu r}$	x10 <sup>-6</sup> /°C	5~10
Curie temperature	T <sub>c</sub>	°C	> 300
Density	δ	kg /m³	$5.0 \times 10^3$
Resistivity	ρ	$M\Omega*m$	> 5.0
Frequency coverage of Reflection loss (under -20dB)	-	MHz	630~1040
Optimized thickness of tiles	-	mm	4.0



#### **Features**

- ullet Absorption of lower electromagnetic waves in the range of 30 MHz  $\sim 1$  GHz
- Wide frequency and fire resistant
- An electromagnetic absorbing material
- Easy and quick to assemble
- No physical degradation over time
- Ultra thin, so takes up little space

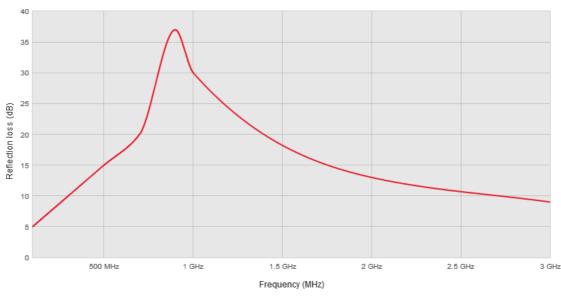
#### **Applications**

- Dark box for mobile phone inspection
- Prevention of radio communications disturbance
- Prevention of TV ghost
- Prevention of UHF RFID-readers interference

## **Characteristics**

- Standard weight: 214 gr.
- Standard dimensions: 100 x 100 x 4.0 mm
- Main hazards: No risk of explosion, flammability, reactivity or health hazard

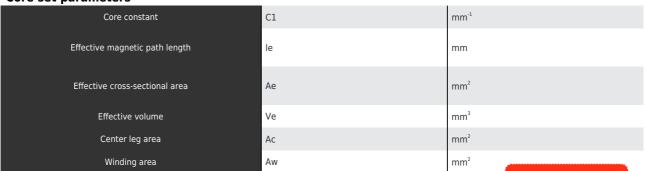
#### **Performance characteristics**



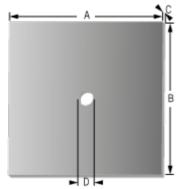
Please note: These values are measured under laboratory conditions. Results may vary in other situations; please read our Guarantee.

Core set parameters

3610 - UHF ferrite absorber tile



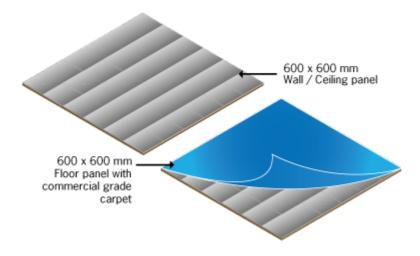




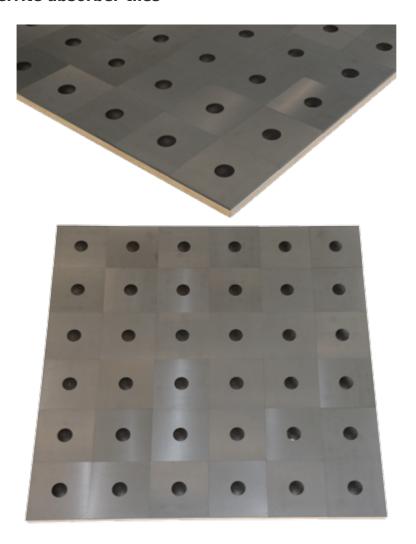
Part number	A (mm)	B (mm)	C (mm)	D (mm)	Weight (gr)
3610-100-40	99.95 (±0.10)	99.95 (±0.10)	4.00 (±0.1)	10 (±0.2)	214
3610-600-40	59.97(±0.10)	59.97(±0.10)	4.00 (±0.1)	10 (±0.2) (36x)	7704

## Supplied as 600 x 600mm panels (optionally available)

Both the 3610 UHF ferrite absorber tile and the 3600 VHF ferrite absorber tile are optionally available in the panel format of 36 Ferrite absorber tiles.









 $<sup>\</sup>ensuremath{^{\star}}$  Note: The  $\ensuremath{\text{red}}$  blocks are required