

DATA SHEET

TTZ-500 and TTZ-100 Hexagonal Ferrites

Applications

- Antenna, absorber and inductor applications for military and commercial markets

Features

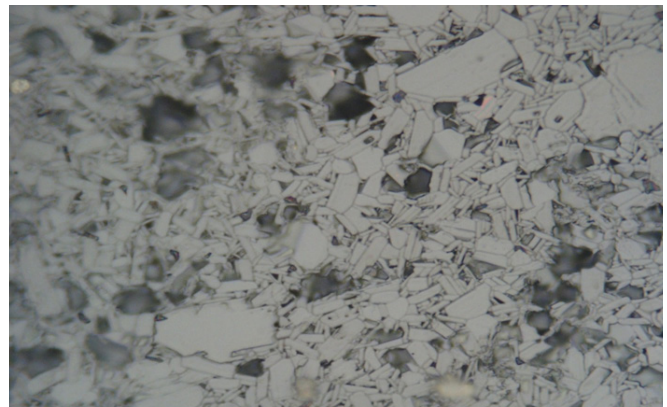
- $\text{Co}_2\text{Z}:\text{K}$ (TTZ-500)
 - Highest frequency resonance on any Z-phase material in the market.
 - Designed for 500 MHz antenna applications.
- $(\text{Zn},\text{Co})_2\text{Z}$ (TTZ-100)
 - Designed for 100 MHz antenna applications.

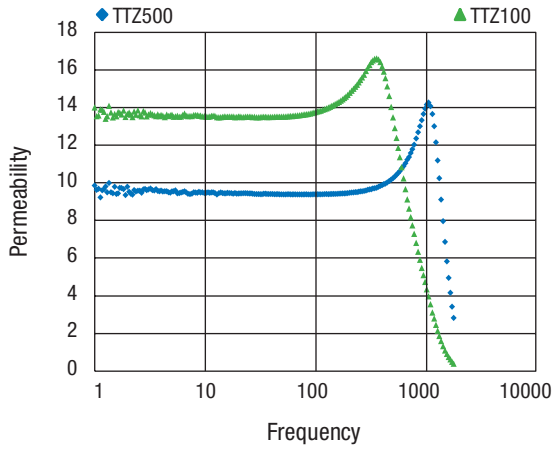
TTZ-100 is a composition based on the Z-type hexagonal ferrite material with permeability (μ') > 13 and a magnetic Q (μ'/μ'') > 30 (at 100 MHz) specifically designed for antenna applications around 100 MHz. The material may be supplied in powder form with custom particle sizes or as a sintered ceramic product with dimensions up to 4" x 4" squares.

TTZ-500 is a composition based on the Z-type hexagonal ferrite material with permeability (μ') > 7 and a magnetic Q (μ'/μ'') > 15 (at 500 MHz) specifically designed for antenna applications around 500 MHz. The material may be supplied in powder form with custom particle sizes or as a sintered ceramic product in shapes with dimensions up to 4" x 4" squares.

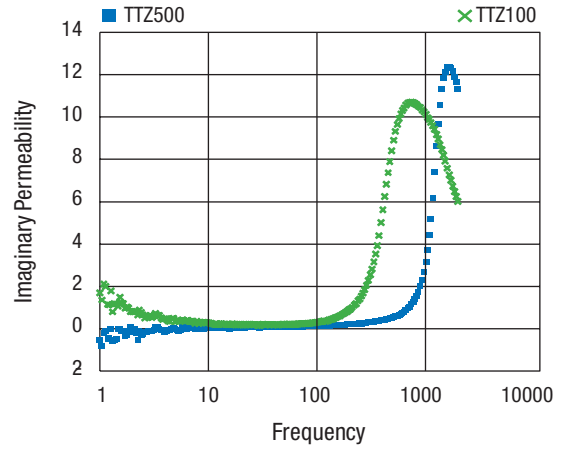
Blends of the TTZ-100 and TTZ-500 are also available for applications in the intermediate frequency range. TTZ-500 may be used for applications up to 800 MHz but the magnetic Q decreases frequency. For applications below 100 MHz, our TT1 and TT2 series spinels would be most suitable.

A typical microstructure at 500x magnification (for TTZ-500) is shown below:

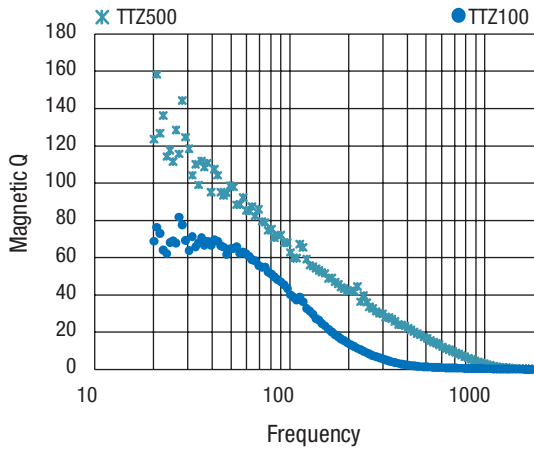




Permeability Spectra for TTZ-100 and TTZ-500 Materials



Imaginary Permeability for TTZ-100 and TTZ-500 Materials



Magnetic Q for Typical TTZ-500 and TTZ-100 Materials

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