Technical Information

Ferrite filters provide an easy and efficient way of reducing both radiated and conducted interference. Kycon uses a medium permeability nickel zinc ferrite material that is most effective attenuating frequencies above 30MHz.

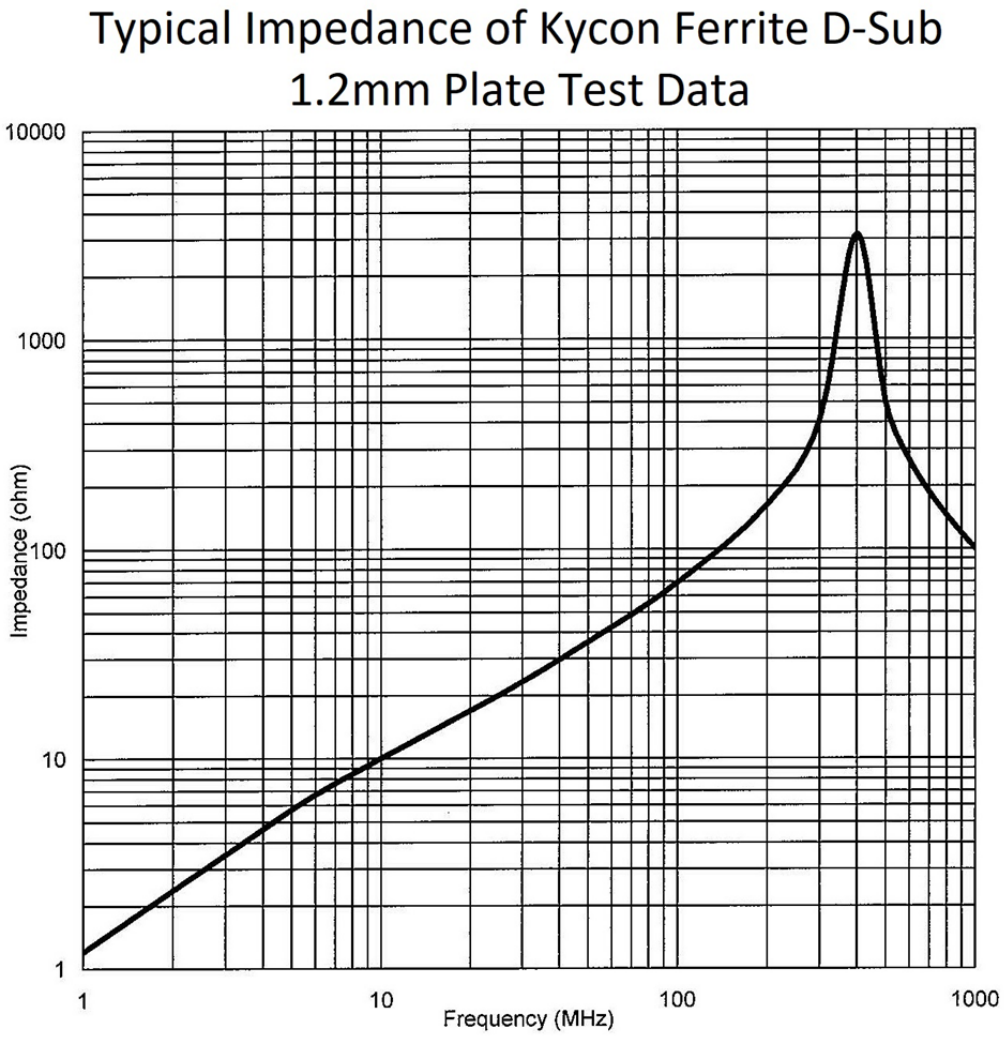
$$Attenuation = 20\log_{10}\frac{[Z_S + Z_F + Z_L]}{[Z_S + Z_L]}dB$$

Where: $Z_S = Source\ Impedance$

$Z_F = Ferrite\ Impedance$

$Z_L = Load\ Impedance$

With the above impedance values calculated at the interference frequency.



The above chart is typical performance for a 1.2mm thick ferrite plate at room temperature. Impedance will be reduced by increased temperature (down approximately 15% at 100°C at 25MHz) and by increased DC bias (down approximately 15% at 1 amp at 25MHz). Also impedance varies with ferrite thickness. Please contact our technical support for data specific to your application.