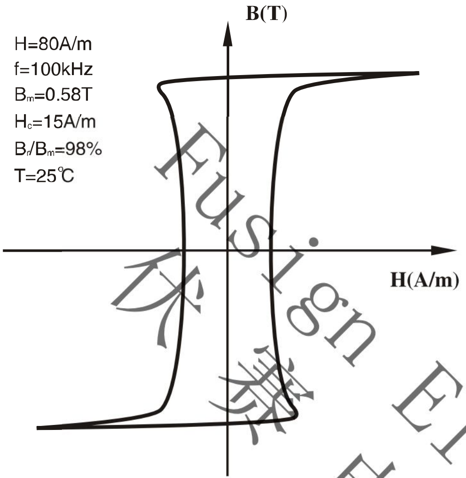
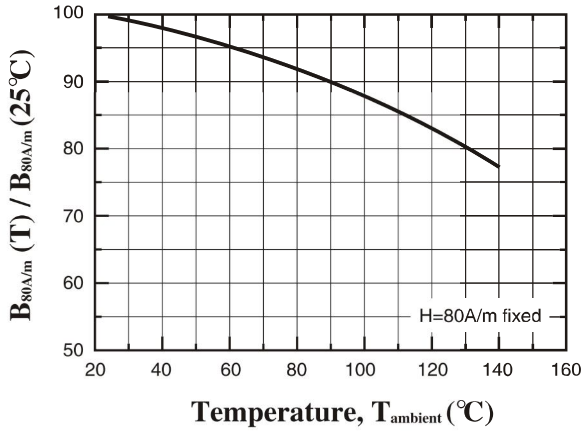
HIGH QUALITY MAG-AMP CORES

TYPICAL MAGNETIC CHARACTERISTICS

Typical B-H loop shape @100kHz

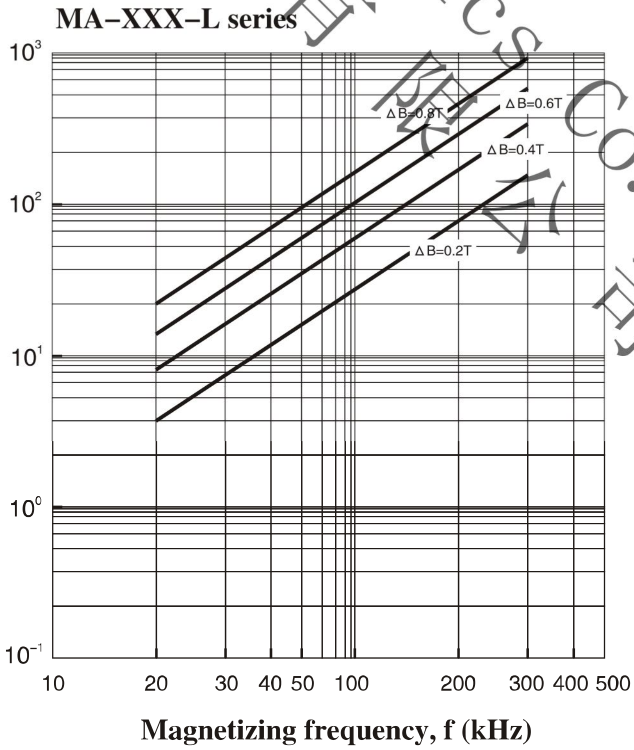


Temperature dependency of B_T(T)



* At higher temperatures a lower total flux density swing, Φ(T)=2B(T)A, has to be considered by designer in SMPS design.

Typical magnetic reversal losses of MA series Mag-Amp cores, Pc(f, ΔB)

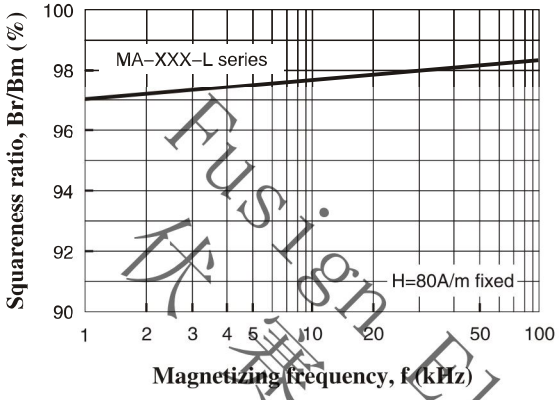


* The core losses measured by sinusoidal waveforms in bipolar swing between +B to -B.

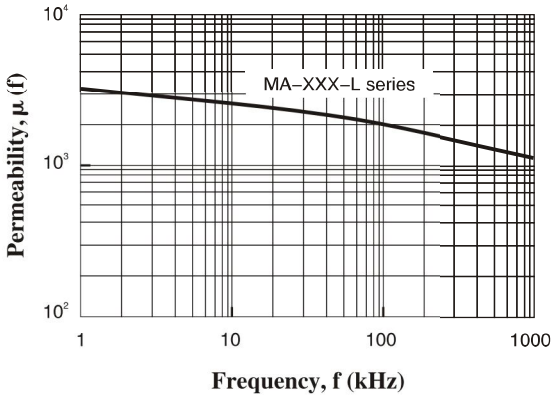
HIGH QUALITY MAG-AMP CORES

TYPICAL MAGNETIC CHARACTERISTICS

Typical frequency dependency of squareness ratio and permeability

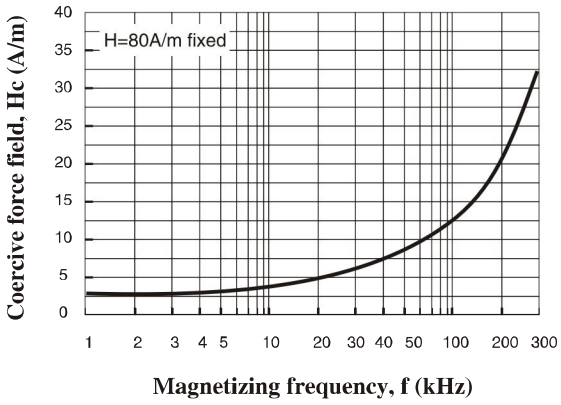


* The squareness of MA-XXX-L series Mag-Amp with Magnetizing frequency shows a nearly constant between lower and higher frequency ranges. MA-XXX-L series is suitable for a high stability SMPS when the load changes dynamically in parallel connected PSU system.



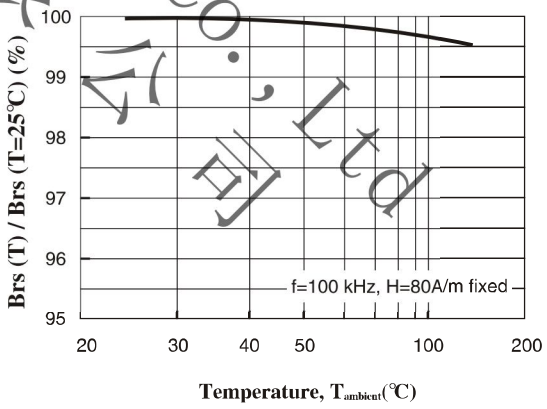
* The permeability of MA-XXX-L series Mag-Amp shows a quite different characteristics with frequency. Before install MA series Mag-AMP in SMPS, it have to be considered the corner frequency and stability of feedback circuit in the PSU system.

Typical frequency dependency of Hc



* The coercive force field have still low value even at 300kHz. it might be provide a higher Mag-Amp gain from PSU feedback-controlled switching element to the output.

Typical temp. dependency of Br/Bm



* The squareness ratio with ambient temperature are negligible in most cases up to 100℃. In normal case, it may not affect the output voltage regulation if the ambient temperature goes up to 100℃ except on if the PSU system has a temperature protection function in switching element.