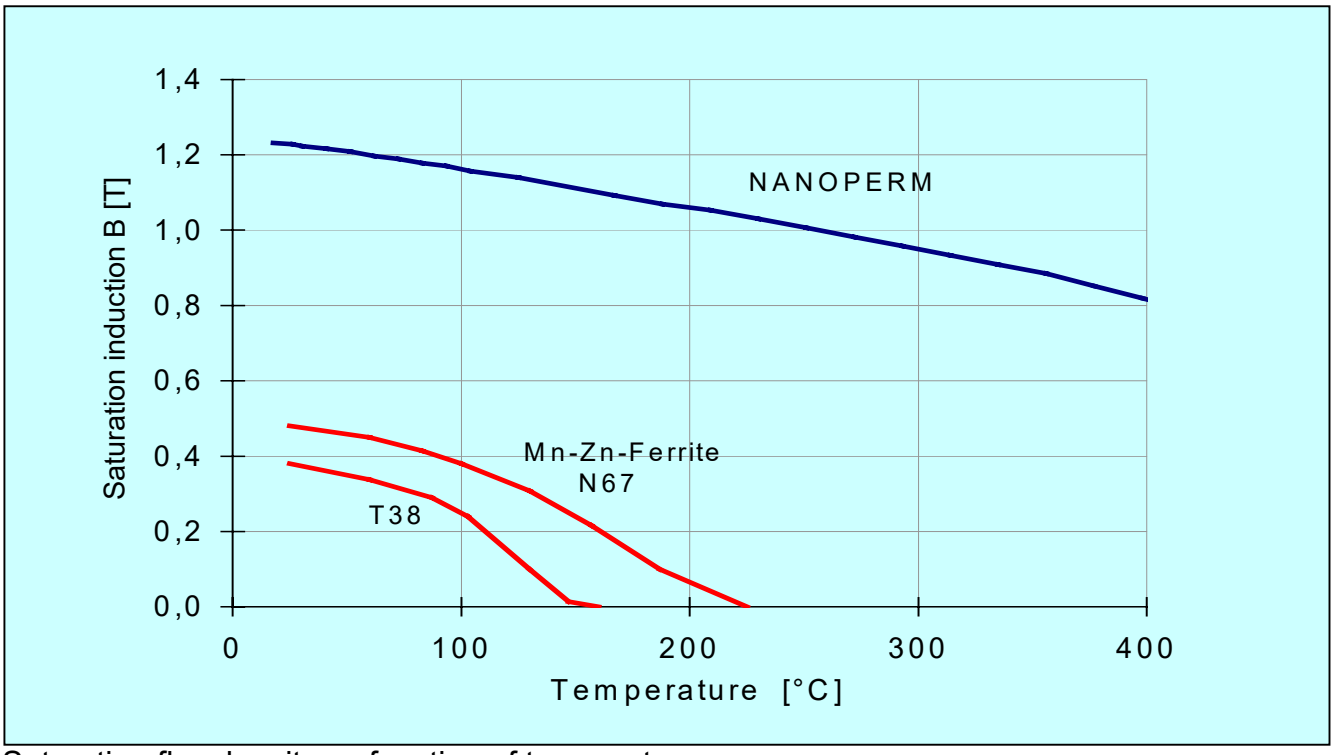
Comparison NANOPERM® - Ferrite



Saturation flux density as function of temperature

Alloy	**Permeability** μ_r @ 10kHz / 100kHz	**Saturation induction** B_s [T] @ 25°C / 100°C	**Curie temperature** T_c [°C]	**Max. working temperature** [°C]
Ferrite E37	15.000 / 12.000	0,38 / 0,21	> 130	95
Ferrite T38	10.000 / 10.000	0,38 / 0,23	> 130	95
NANOPERM	100.000 / 20.000	1,2 / 1,18	600	120 (180)
	80.000 / 28.000	1,2 / 1,18	600	120 (180)
	30.000 / 20.000	1,2 / 1,18	600	120 (180)

NANOPERM vs. Ferrite:

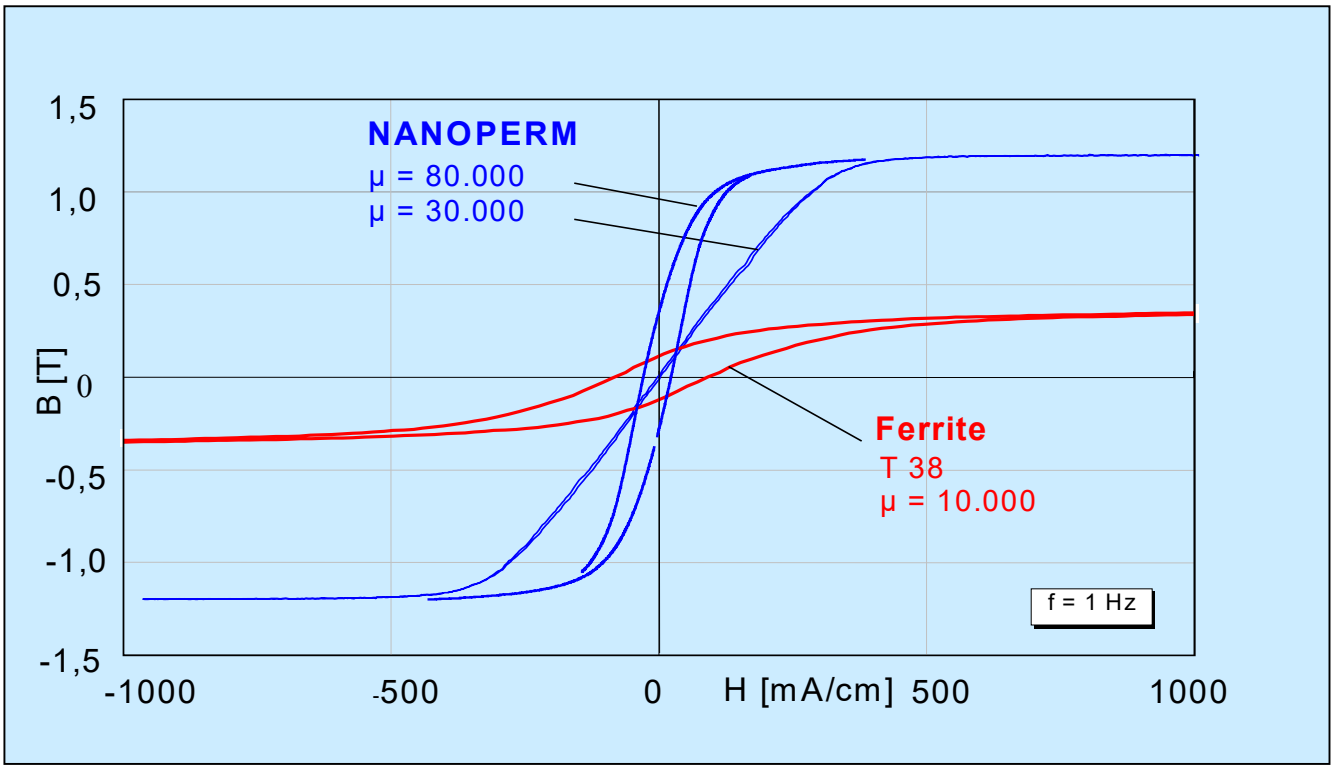
→ NANOPERM permeability is up to 10 times higher
→ NANOPERM saturation induction is 3 times higher
→ NANOPERM working temperature range up to 180°C
→ NANOPERM price is appr. 1,5 – 2-fold higher

NANOPERM affords advanced, smaller and lighter components

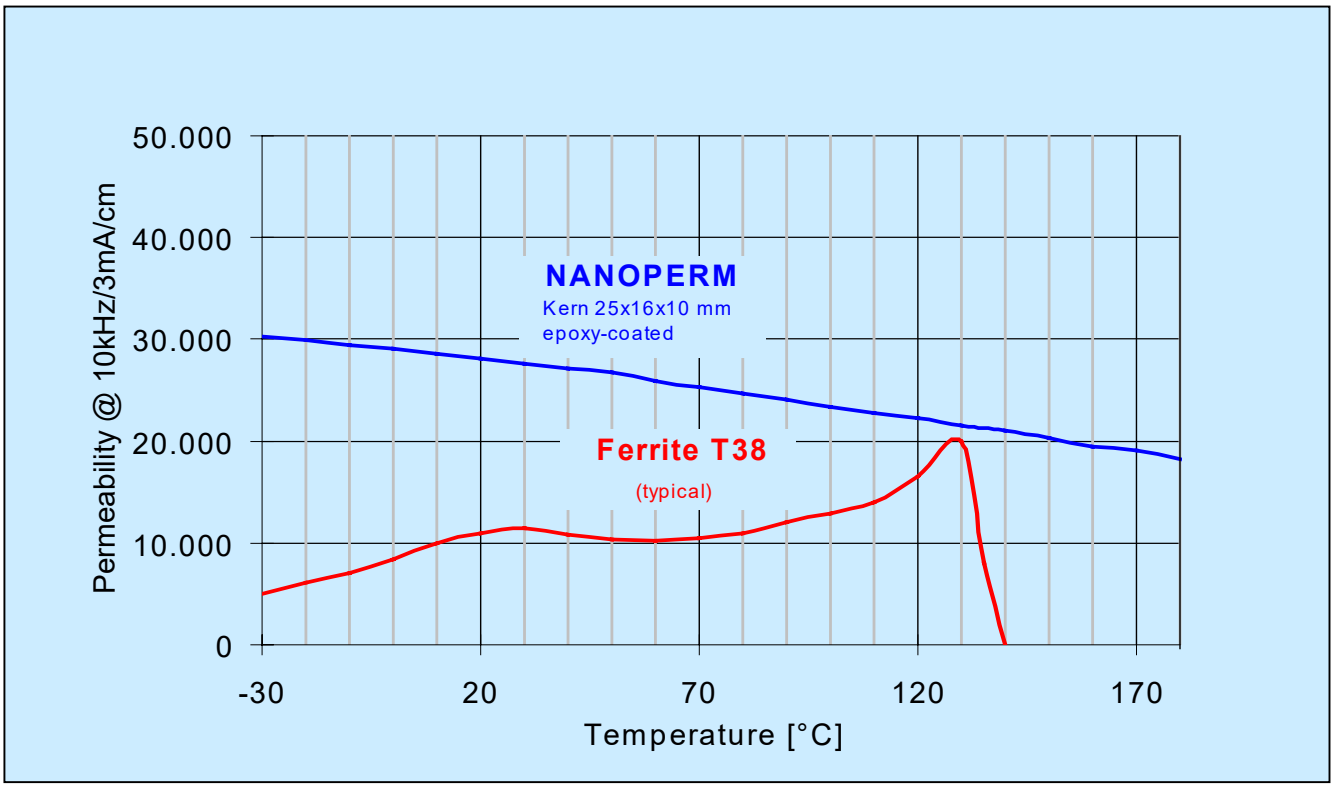
MAGNETEC GmbH – Marie-Curie-Str. 1 – 63457 Hanau – Fon: +49 6181 18 03 90 – Internet: www.magnetec.de

Magnetec

Comparison NANOPERM® - Ferrite



Hysteresis loops, saturation field as a function of permeabiltity level



Permeability as a function of temperature

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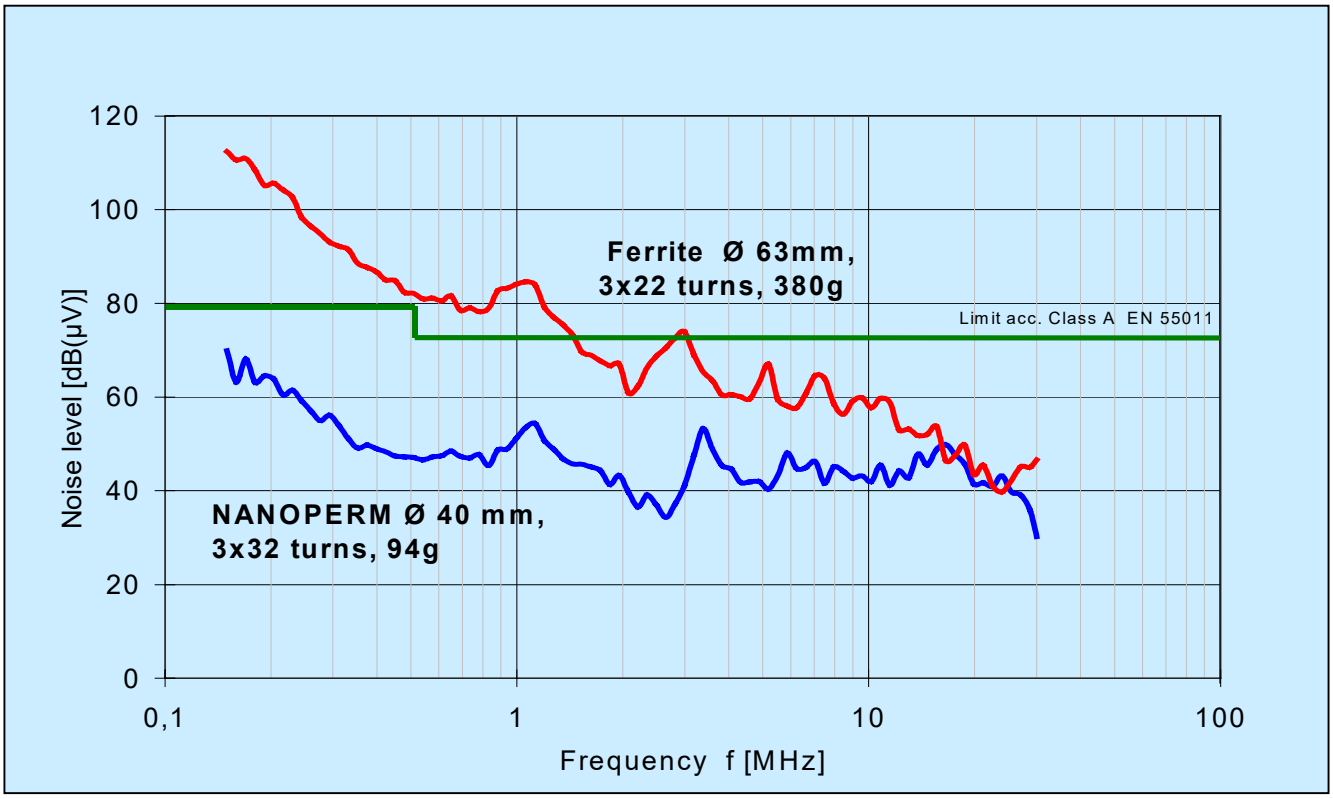
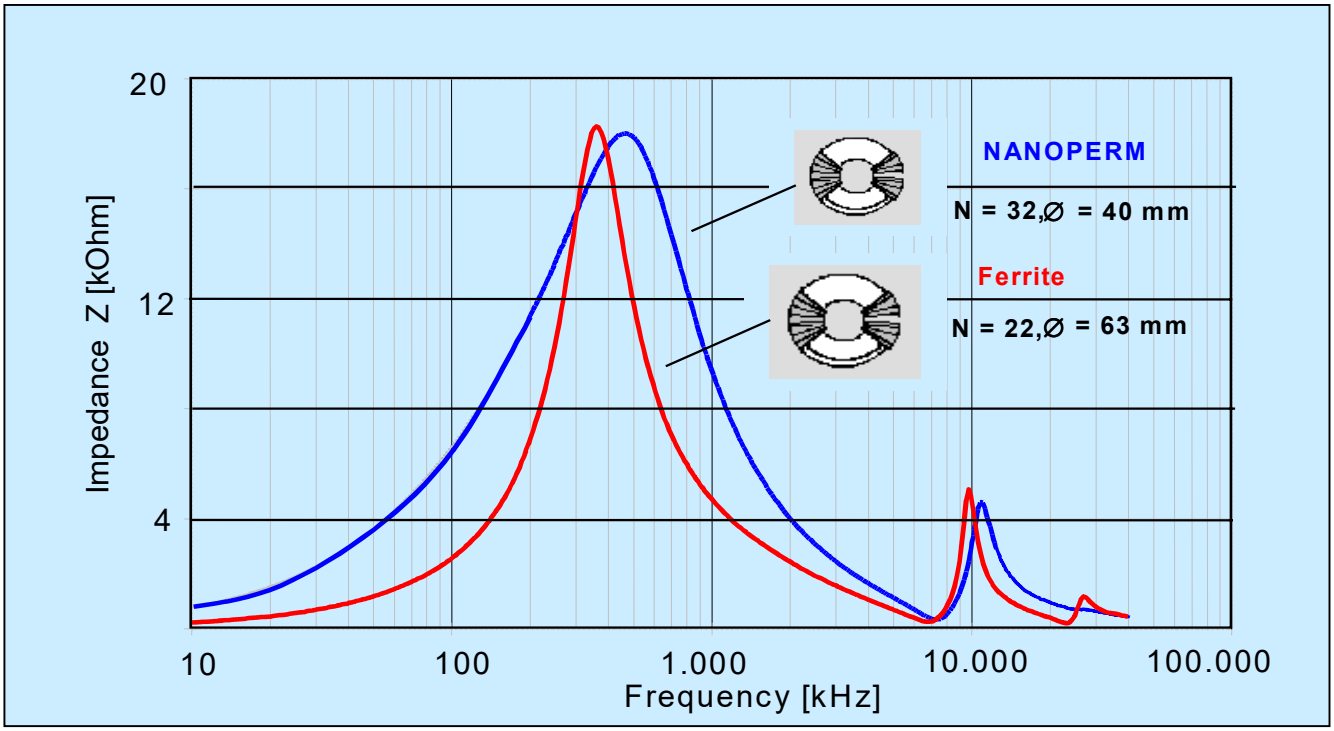


EMI – Achieving more stringent noise limits even at a smaller build volume



Insertion loss - Same impedance curve with smaller component size