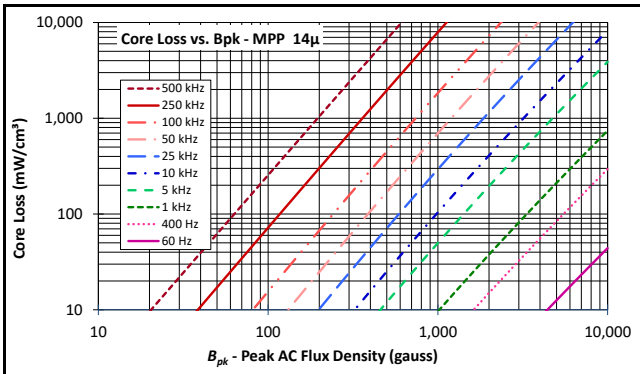
Material:	MPP 14µ Toroid

Revision 20200519 - Generated 2020-May-26

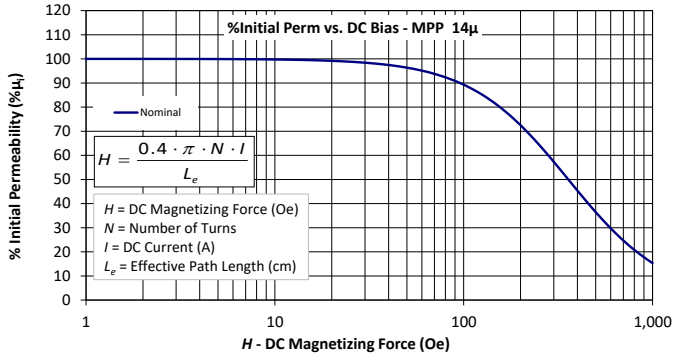
µi (reference)	014
Typical AL tolerance	± 8%
Density	6.0 g/cm³
Bsat	7.5 kG
Core Loss (100kHz, 300g)	157 mW/cm³ (nom) 180 mW/cm³ (max)
%Perm at DC Bias (200 Oe)	72.5% (nom) 66.0% (min)



$$\text{Core Loss (mW/cc)} = \frac{f}{\frac{a}{B_{pk}{}^{3}} + \frac{b}{B_{pk}{}^{2.3}} + \frac{c}{B_{pk}{}^{1.65}}} + d \cdot B_{pk}{}^{2} \cdot f^{2}$$

where B_{pk} expressed in gauss, f in hertz, and:

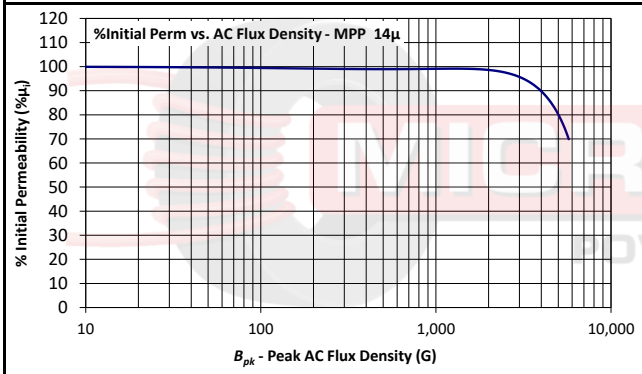
a=1.914E+09, b=4.349E+08, c=4.331E+06, d=8.850E-14



$$\%\mu_i = \frac{1}{a + b \cdot H^{c}} + d$$

where H expressed in oersted, and:

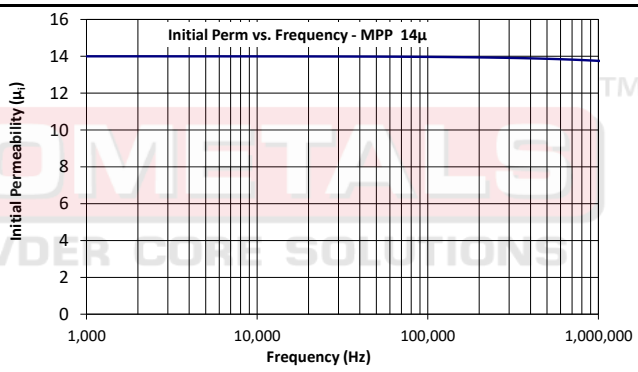
a=1.000E-02, b=5.683E-07, c=1.662E+00, d=0.000E+00



$$\%\mu_i = \frac{1}{\frac{1}{a + bB^{c}} + \frac{1}{dB^{e}} + \frac{1}{f}}$$

where B_{pk} expressed in gauss, and:

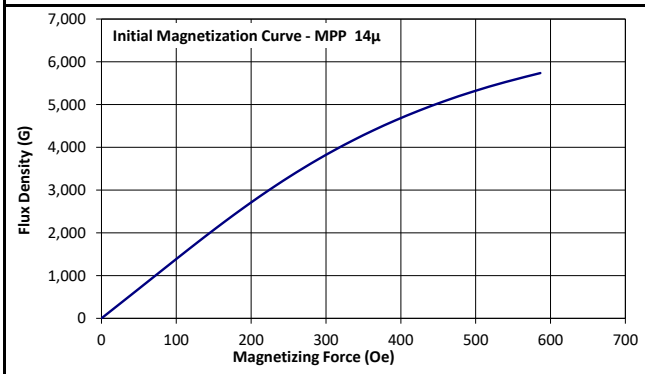
a=3.000E+02, b=5.905E-01, c=2.738E-01, d=3.576E+08, e=-1.544E+00, f=1.500E+02



$$\mu_i = \frac{1}{a + bf^{c}} + d$$

where f expressed in hertz, and:

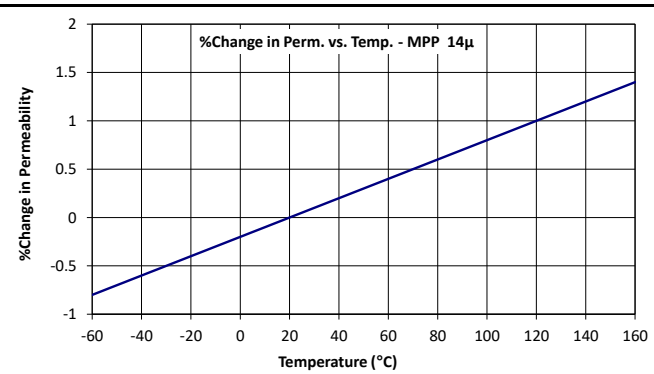
a=7.143E-02, b=5.717E-09, c=8.920E-01, d=0.000E+00



$$B_{pk} = \frac{\mu_i}{\frac{1}{H + aH^{b}} + \frac{1}{cH^{d}} + \frac{1}{e}}$$

where B_{pk} expressed in gauss, H in oersted, and:

a=6.690E-04, b=2.256E+00, c=2.003E+09, d=1.000E-08, e=5.338E+02



$$\%\left(\frac{\Delta\mu_i}{\mu_i}\right) = a(T - 20) * 0.0001$$

where T expressed in celsius, and:

a=1.000E+02

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