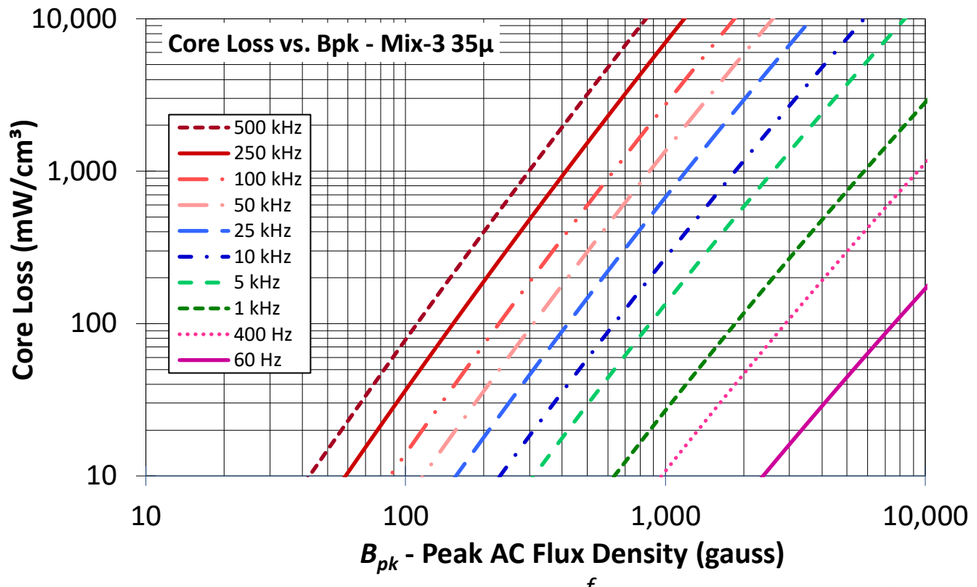
Mix: -3

Revision 2023-Dec-15 - Generated 2023-Dec-15

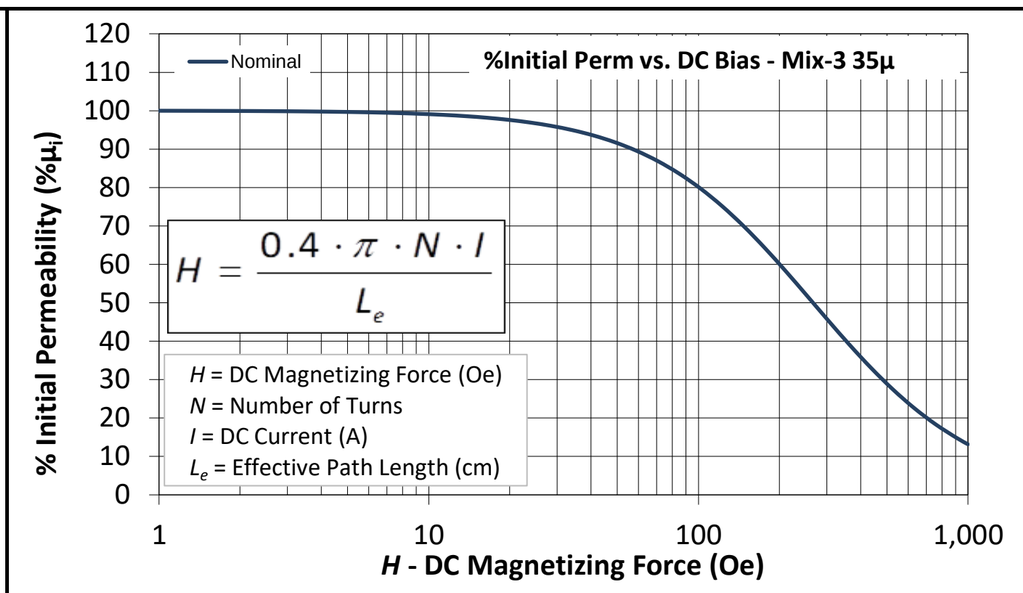
µi(reference)	35
Typical AL tolerance	± 10%
Color Code	Gray/Clear
Density	6.5 g/cm³
Bsat	17.6kG
Core Loss (100kHz, 140g)	31 mW/cm³ (nom) 36 mW/cm³ (max)
%Perm at DC Bias (200 Oe)	60.1% (nom) 53.7% (min)



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

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

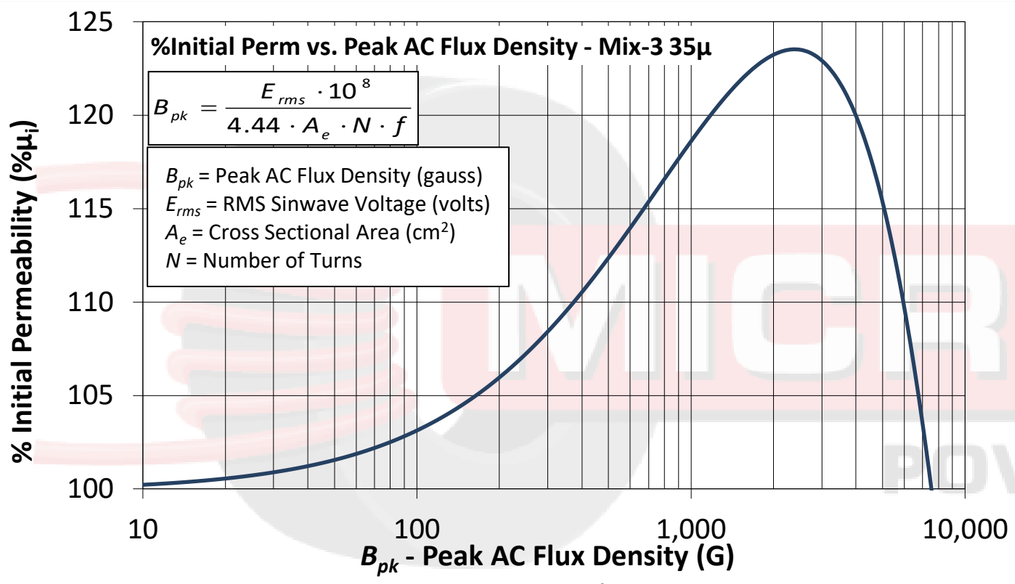
a=1.90E+09, b=2.00E+08, c=9.00E+05, d=4.30E-15



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

where H expressed in oersteds, and:

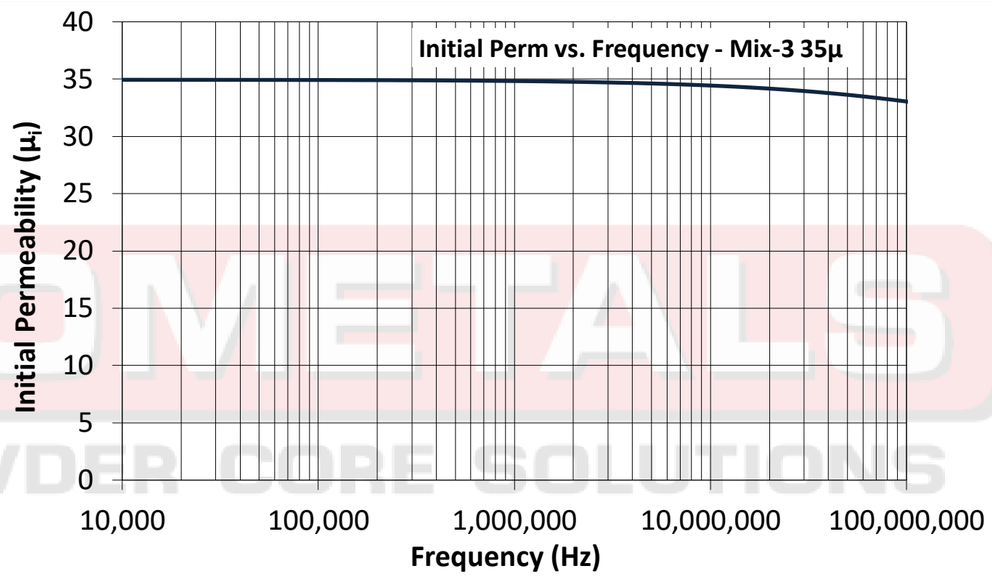
a=1.00E-02, b=3.49E-06, c=1.43, d=0.00



$$\%\mu_i = \frac{1}{\frac{1}{a + bB_{pk}^{\ c}} + \frac{1}{dB_{pk}^{\ e}} + \frac{1}{f}}$$

where B_{pk} expressed in gauss, and:

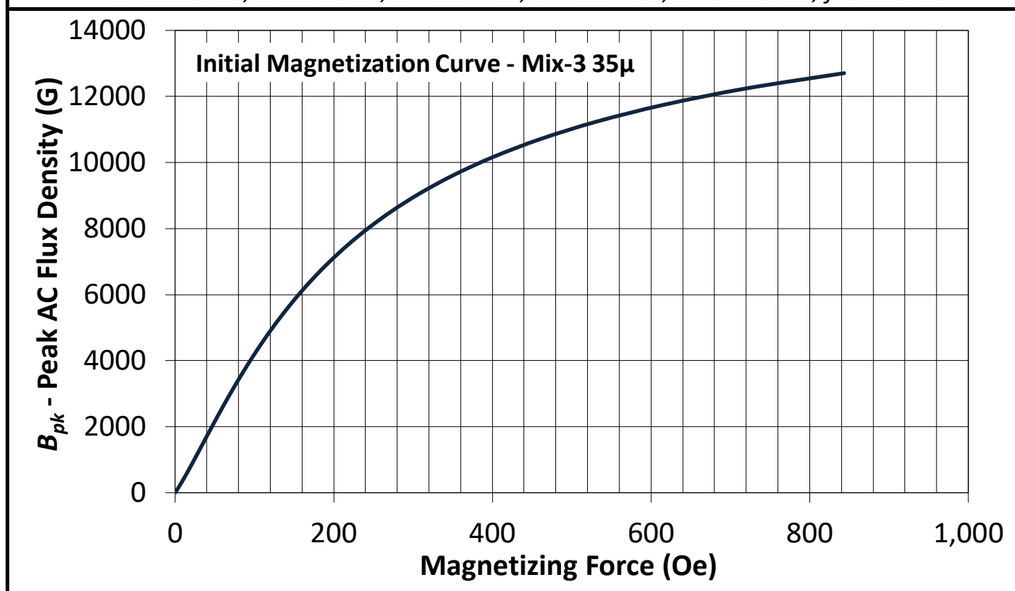
a=3.50E+02, b=3.78E-01, c=1.03E+00, d=1.76E+10, e=-1.98E+00, f=1.40E+02



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

where f expressed in hertz, and:

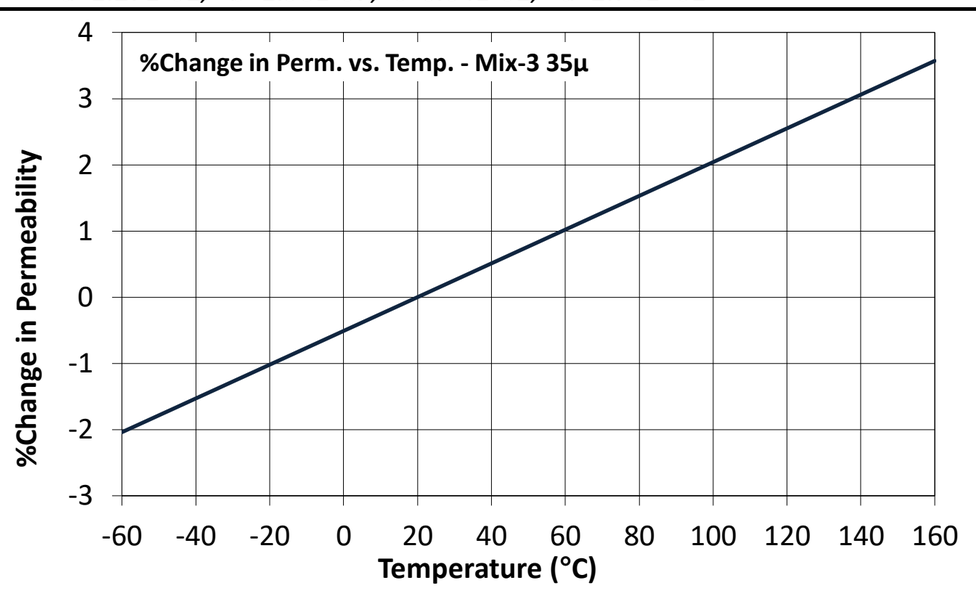
a=1.27E-01, b=1.98E-07, c=6.64E-01, d=2.70E+01



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

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

a=4.11E-02, b=1.75E+00, c=3.64E+01, d=5.64E-01, e=5.04E+02



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

where T expressed in celsius, and:

a=255

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