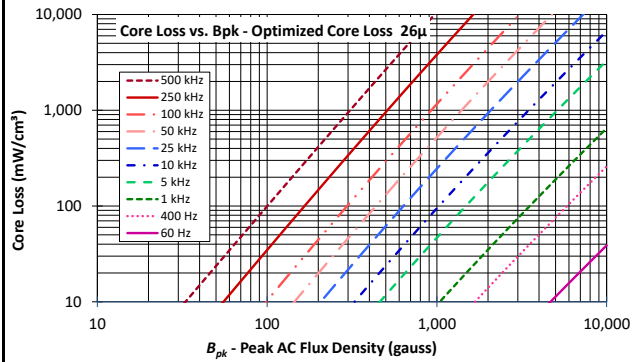




**Material:** Optimized Core Loss 26μ Toroid

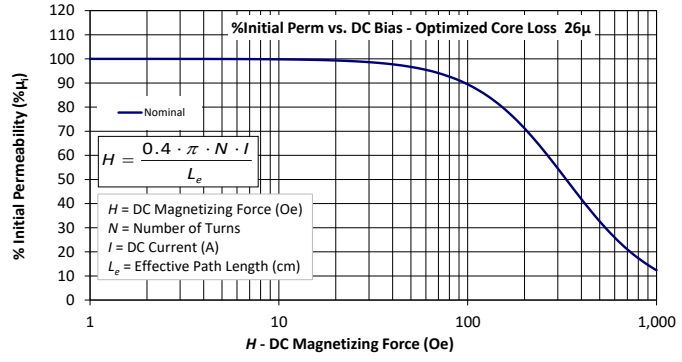
Revision 20200519 - Generated 2020-May-26

|                           |  |
|---------------------------|--|
| μi (reference)            | 026  |
| Typical AL tolerance      | ± 8%   |
| Density                   | 6.2 g/cm <sup>3</sup>  |
| Bsat                      | 11.2 kG  |
| Core Loss (100kHz, 300g)  | 103 mW/cm <sup>3</sup> (nom)<br>118 mW/cm <sup>3</sup> (max) |
|                           | 71.2% (nom)  |
| %Perm at DC Bias (200 Oe) | 64.1% (min)  |



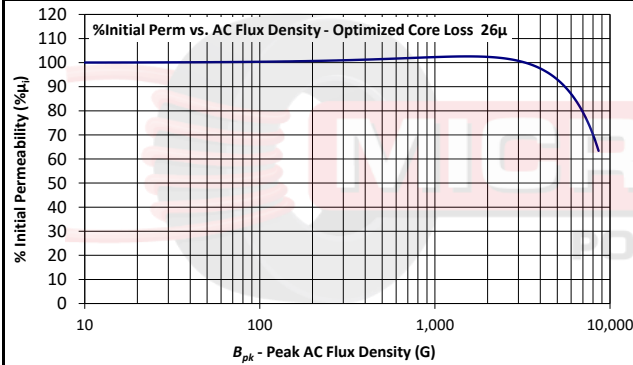
$$\text{Core Loss (mW/cc)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$$

where B<sub>pk</sub> expressed in gauss, f in hertz, and:  
a=1.000E+06, b=4.028E+08, c=5.150E+06, d=2.400E-14



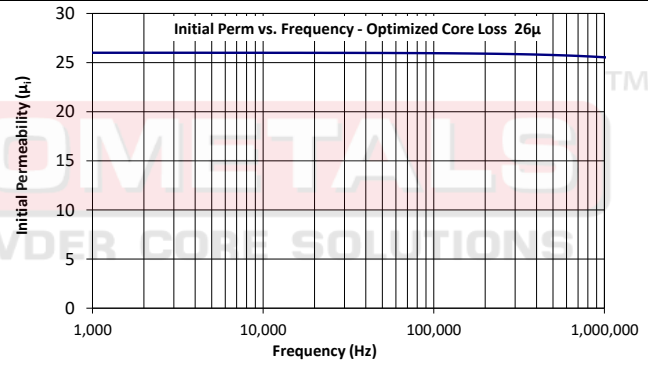
$$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$$

where H expressed in oersted, and:  
a=1.000E-02, b=3.288E-07, c=1.778E+00, d=0.000E+00



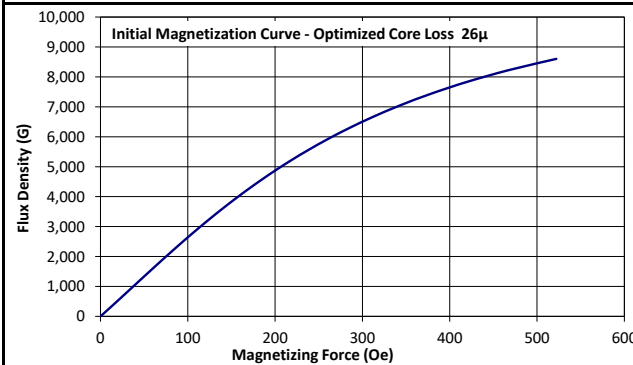
$$\% \mu_i = \frac{1}{\frac{1}{a + bB^c} + \frac{1}{dB^e} + \frac{1}{f}}$$

where B<sub>pk</sub> expressed in gauss, and:  
a=1.659E+03, b=2.669E-01, c=1.398E+00, d=9.090E+10, e=-2.138E+00, f=1.064E+02



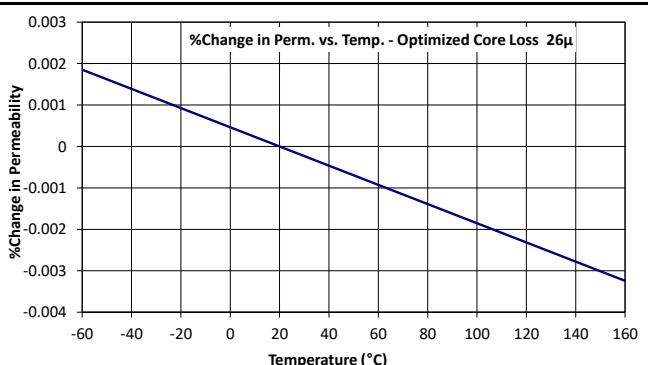
$$\mu_i = \frac{1}{a + bf^c} + d$$

where f expressed in hertz, and:  
a=3.846E-02, b=6.059E-10, c=1.010E+00, d=0.000E+00



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

where B<sub>pk</sub> expressed in gauss, H in oersted, and:  
a=3.281E-03, b=1.999E+00, c=5.781E+06, d=2.120E+00, e=4.322E+02



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

where T expressed in celsius, and:  
a=-2.316E-01, b=-7.252E-03, c=1.729E-02, d=2.183E-04, e=-2.864E-04