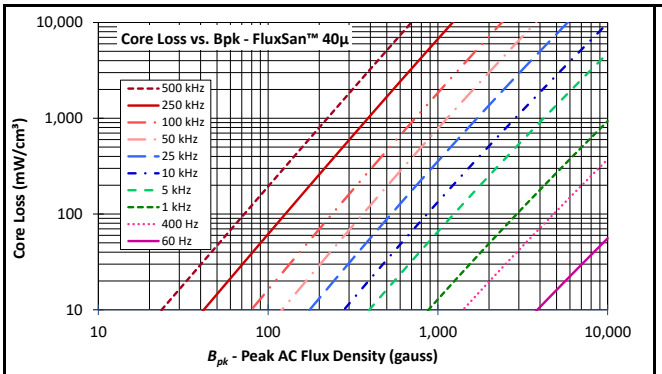
Material:	FluxSan™ 40µ Toroid

Revision 20200519 - Generated 2020-May-26

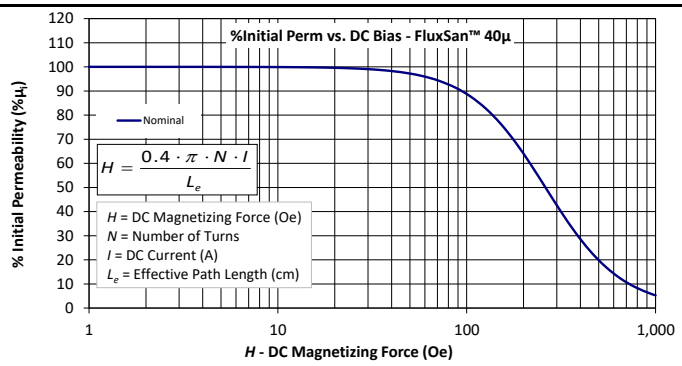
µi (reference)	040
Typical AL tolerance	± 8%
Density	6.6 g/cm³
Bsat	17.3 kG
Core Loss (50kHz, 1000g)	780 mW/cm³ (nom) 897 mW/cm³ (max)
%Perm at DC Bias (200 Oe)	64.0% (nom) 54.5% (min)



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

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

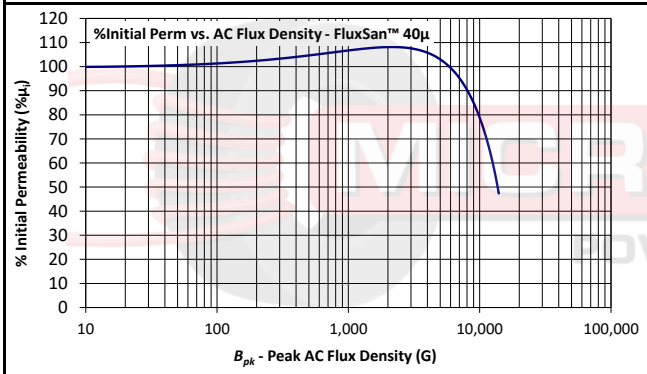
a=1.000E+06, b=3.071E+08, c=3.524E+06, d=5.634E-14



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

where H expressed in oersted, and:

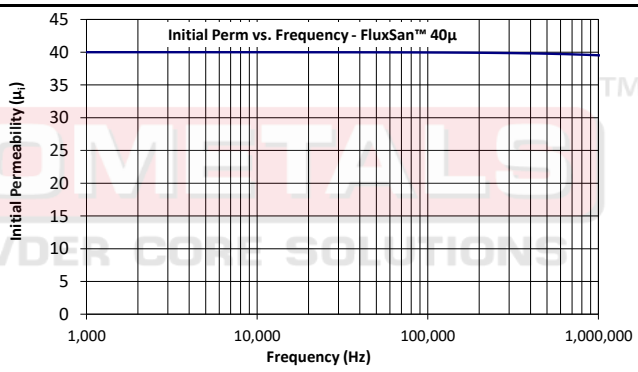
a=1.000E-02, b=6.314E-08, c=2.151E+00, d=0.000E+00



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

where B_{pk} expressed in gauss, and:

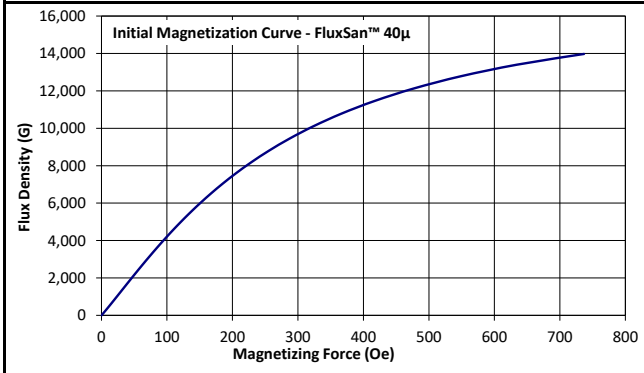
a=5.873E+02, b=3.622E-01, c=1.073E+00, d=1.217E+10, e=-1.934E+00, f=1.205E+02



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

where f expressed in hertz, and:

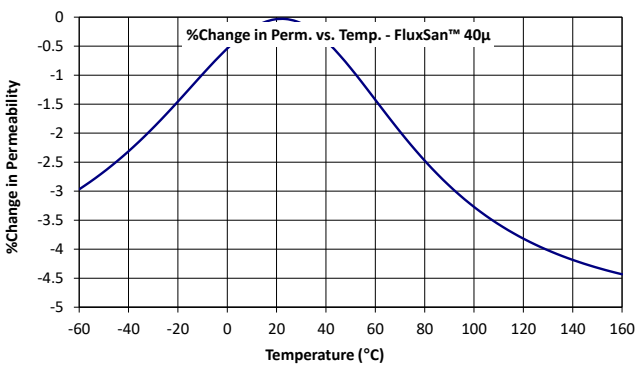
a=2.500E-02, b=1.025E-10, c=1.078E+00, d=0.000E+00



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

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

a=1.736E-02, b=1.716E+00, c=9.614E+01, d=7.162E-01, e=4.324E+02



$$\%\left(\frac{\Delta\mu_i}{\mu_i}\right) = \frac{a + cT + eT^{2}}{1 + bT + dT^{2}}$$

where T expressed in celsius, and:

a=-5.406E-01, b=-1.104E-02, c=4.669E-02, d=2.073E-04, e=-1.057E-03

Micrometals Arnold Powder Cores, A Division of Micrometals, Inc. - 5615 E. La Palma Ave., Anaheim, California 92807 USA
Ph: +1-714-970-9400, Toll Free in USA: +1-800-356-5977, Asia Pacific Sales: +852 3106 3736
www.MicrometalsArnoldPowderCores.com