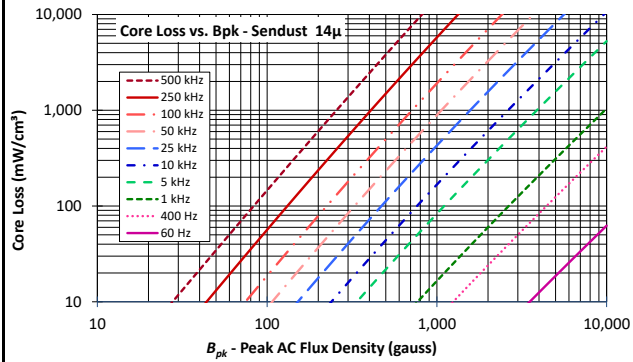




Material: Sendust 14μ Toroid

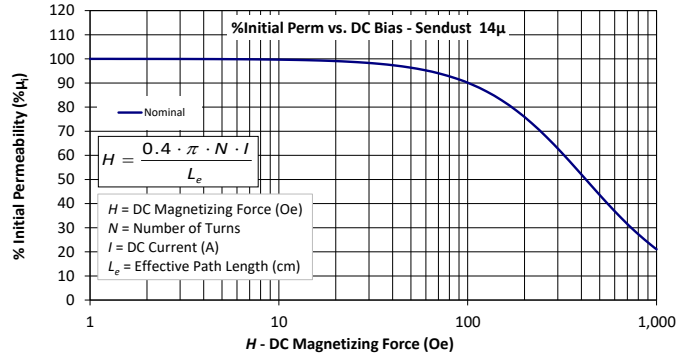
Revision 20200519 - Generated 2020-May-26

| | |
|---------------------------|--|
| μi (reference) | 014 |
| Typical AL tolerance | ± 8% |
| Density | 4.9 g/cm ³ |
| Bsat | 7.9 kG |
| Core Loss (100kHz, 300g) | 180 mW/cm ³ (nom) 207 mW/cm ³ (max) |
| | 75.9% (nom) |
| %Perm at DC Bias (200 Oe) | 70.4% (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_{pk} expressed in gauss, f in hertz, and:
 $a=1.000E+06$, $b=1.814E+08$, $c=3.377E+06$, $d=2.628E-14$

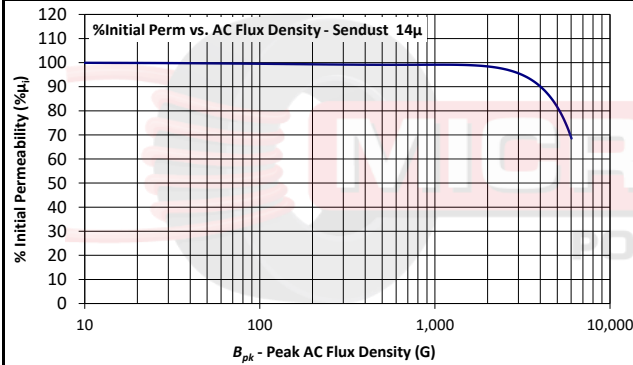


$$H = \frac{0.4 \cdot \pi \cdot N \cdot I}{L_e}$$

H = DC Magnetizing Force (Oe)
 N = Number of Turns
 I = DC Current (A)
 L_e = Effective Path Length (cm)

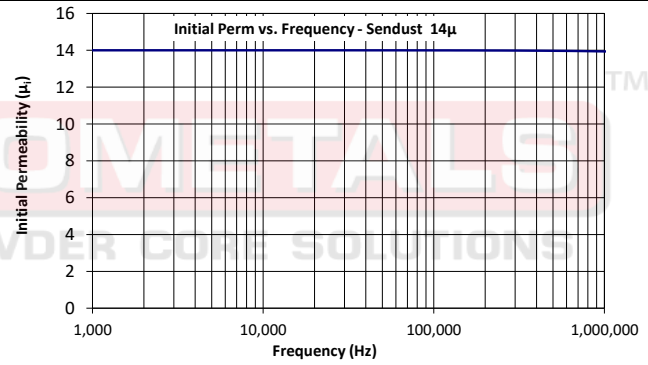
$$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$$

where H expressed in oersted, and:
 $a=1.000E-02$, $b=9.443E-07$, $c=1.533E+00$, $d=0.000E+00$



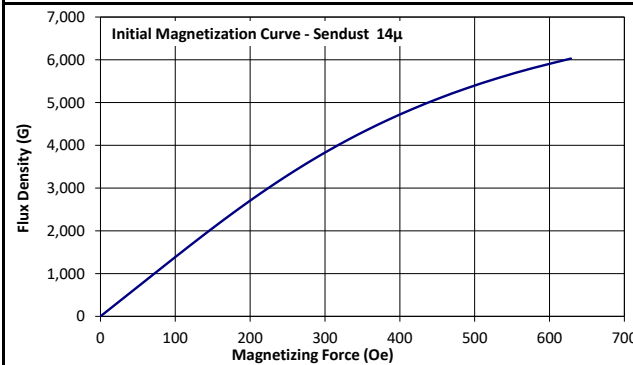
$$\% \mu_i = \frac{1}{\frac{1}{a + bB^c} + \frac{1}{dB^e} + \frac{1}{f}}$$

where B_{pk} expressed in gauss, and:
 $a=3.000E+02$, $b=5.905E-01$, $c=2.738E-01$, $d=3.576E+08$, $e=-1.544E+00$, $f=1.500E+02$



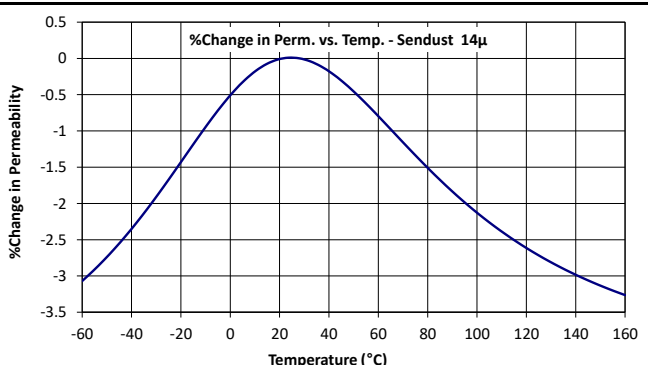
$$\mu_i = \frac{1}{a + bf^c} + d$$

where f expressed in hertz, and:
 $a=7.143E-02$, $b=3.017E-11$, $c=1.170E+00$, $d=0.000E+00$



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

where B_{pk} expressed in gauss, H in oersted, and:
 $a=7.276E-04$, $b=2.222E+00$, $c=2.003E+09$, $d=1.000E-08$, $e=5.631E+02$



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

where T expressed in celsius, and:
 $a=-5.096E-01$, $b=-5.552E-03$, $c=4.212E-02$, $d=1.825E-04$, $e=-8.533E-04$