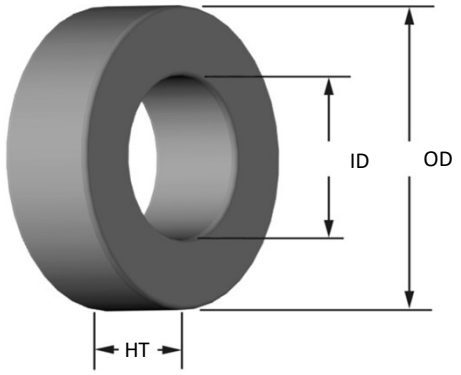
MICROMETALS™
POWDER CORE SOLUTIONS

Part Number:	T106-10B

Revision 2023-Dec-14 - Generated 2025-Feb-19



OD	(nom. - bare core)	26.92 mm	1.060 in
	(max. - including coating, if any)	27.43 mm	1.080 in
ID	(nom. - bare core)	14.48 mm	0.570 in
	(min. - including coating, if any)	13.97 mm	0.550 in
HT	(nom. - bare core)	14.61 mm	0.575 in
	(max. - including coating, if any)	15.24 mm	0.600 in
Mass	(approximate)	25 grams	
Magnetic Dimensions	Ae - Eff. Mag. Cross Section	0.858 cm²	
	Le - Eff. Mag. Path Length	6.49 cm	
	Ve - Eff. Core Volume	5.57 cm³	
	WA - Min. Eff. Window Area	1.53 cm²	
	sa - Surface Area	31.5 cm²	
	mlt - mean length per turn	5.09 cm	
Inductance	µi(reference)	6	
	AL value (nominal)	11.1 nH/N²	
	Test Winding	N=100, #26 AWG	
	Test Frequency	10 kHz	
	Voltage on Agilent 4284A	0.38 V	
	AL tolerance	±5%	

Core Loss & Q

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

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

a=4.00E+09, b=3.00E+08, c=2.70E+06, d=8.00E-16

Q test winding	N=10, #20 AWG
Q frequency	15 MHz
Q min on HP4342A	256

DC Saturation

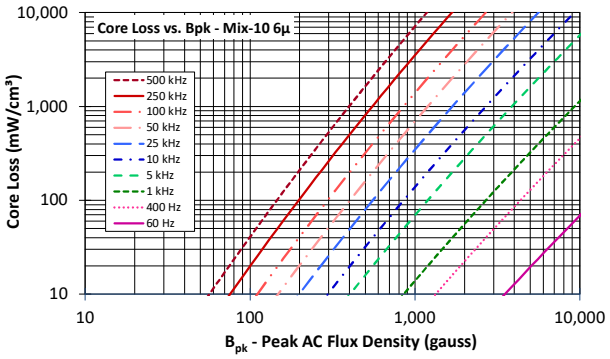
$$\%\mu_i = \frac{1}{a + b \cdot H^{c}} + d$$

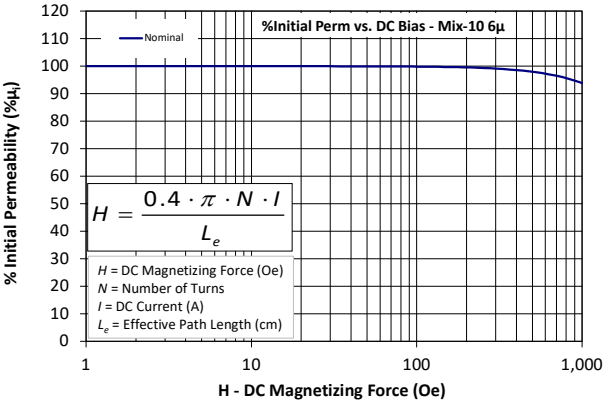
where H expressed in oersteds, and:

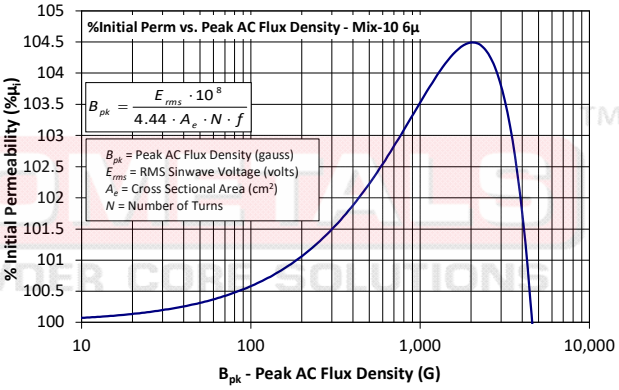
a=1.00E-02, b=5.54E-09, c=1.69, d=0.00

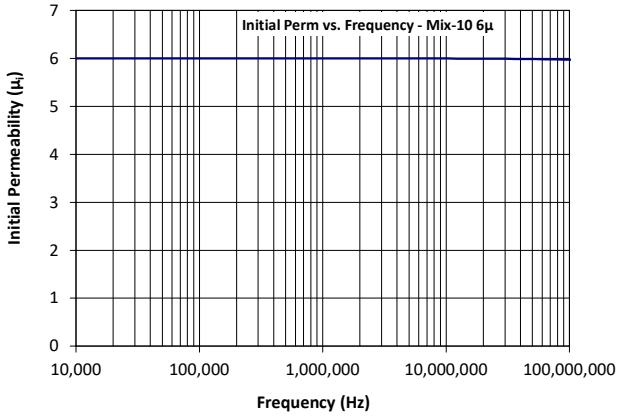
Hdc	200 Oe
Percent Initial Perm(nom.)	99.6%
Percent Initial Perm(min.)	99.4%

Coating/Pkg	Coating Type:	Black/Clear Epoxy Paint
	Voltage Breakdown (min.)	500 Vrms, 60Hz
	Limit	3 mA, 5 s
	Package Quantity	560 Pcs/Box









Winding Table

Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
	mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
Single Layer	Turns	12	15	20	26	32	41	52	65	82	102	128
	Rdc(Ω)	2.0 m	4.0 m	8.4 m	17.4 m	34.1 m	69.5 m	140.1 m	278.6 m	558.9 m	1.1	2.2
Full Winding	Turns	12	19	30	46	71	110	171	264	409	633	980
	Rdc(Ω)	2.0 m	5.0 m	12.6 m	30.8 m	75.6 m	186.4 m	460.8 m	1.1	2.8	6.9	16.9