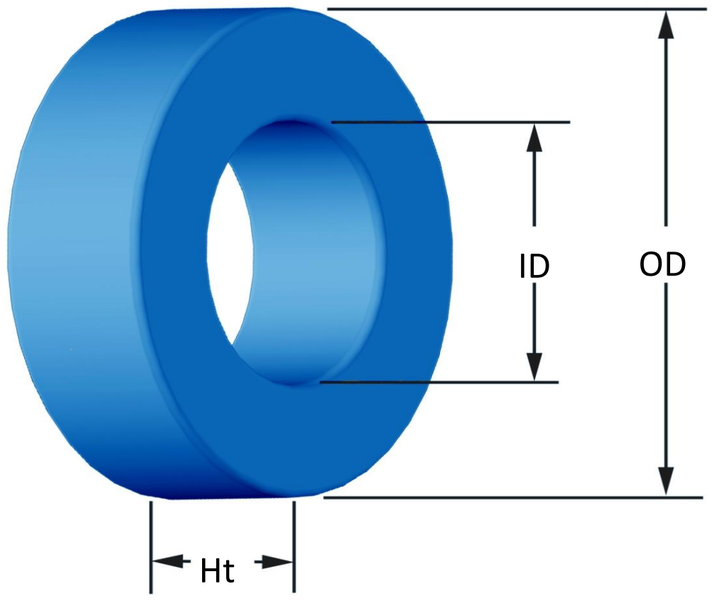
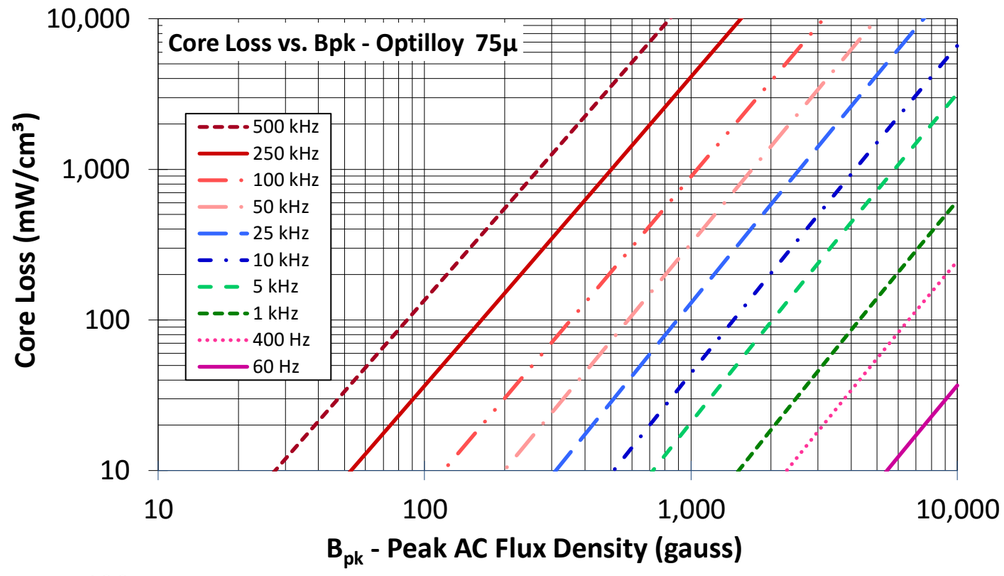
MICROMETALS
ALLOY POWDER CORES

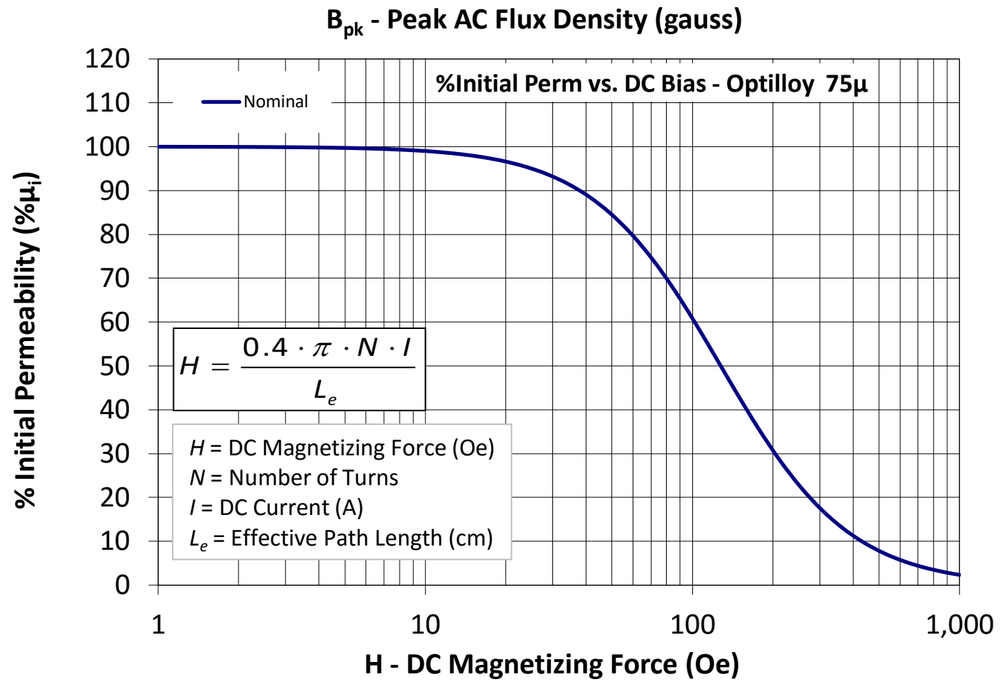
Part Number:	OP-109075-2

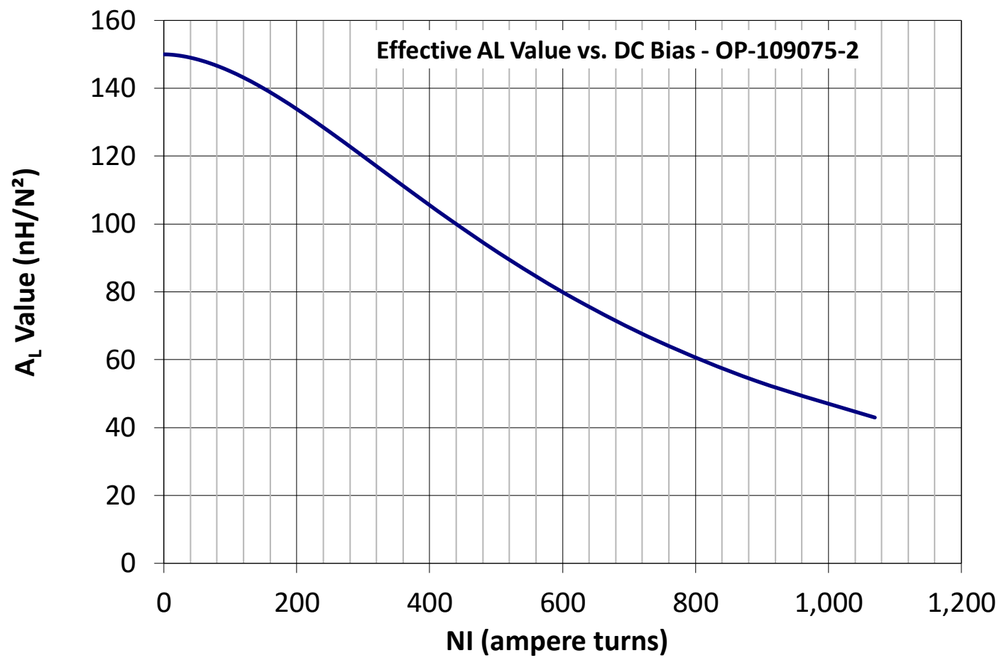
Revision 20160816 - Generated 2016-Aug-16

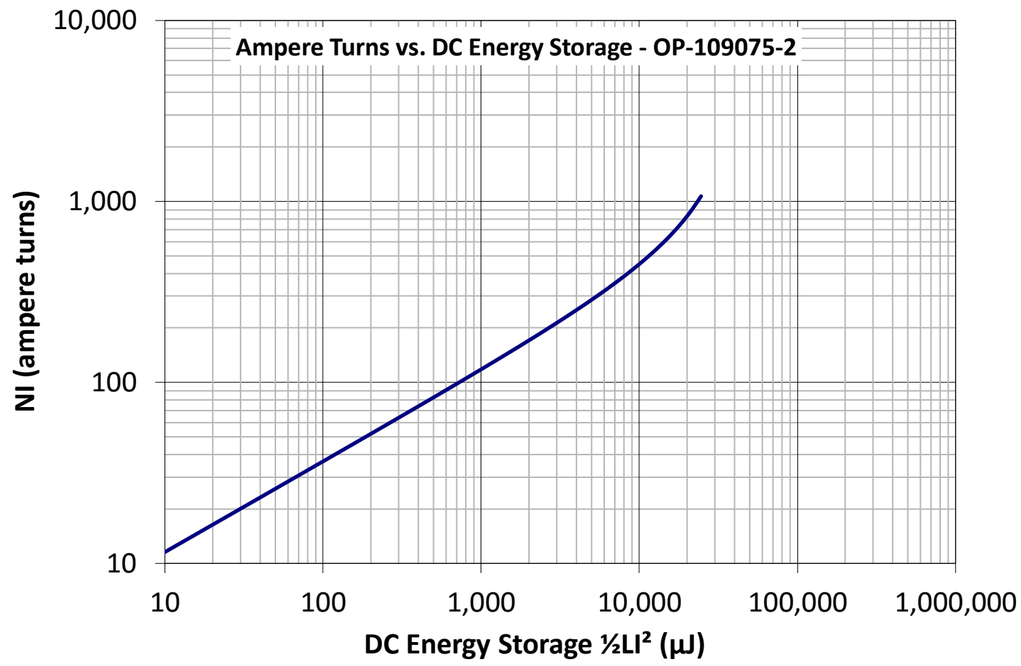


OD	(nom. - bare core)	26.92 mm	1.060 in
	(max. - after coating)	27.81 mm	1.095 in
ID	(nom. - bare core)	14.73 mm	0.580 in
	(min. - after coating)	14.10 mm	0.555 in
Ht	(nom. - bare core)	18.00 mm	0.709 in
	(max. - after coating)	19.00 mm	0.748 in
Mass	(approximate)	46 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.01 cm²	
	L_e - Eff. Mag. Path Length	6.35 cm	
	V_e - Eff. Core Volume	6.43 cm³	
	WA - Min. Eff. Window Area	1.56 cm²	
	sa - Surface Area	35.8 cm²	
	mlt - mean length per turn	5.88 cm	
Inductance	μ_i(reference)	75	
	A_L value (nominal)	150 nH/N²	
	Test Winding	N=80, #26 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.36 V	
	AL tolerance	±8%	
Core Loss	Core Loss(mW/cm³)= $\frac{f}{\frac{a}{Bpk^{3}}+\frac{b}{Bpk^{2.3}}+\frac{c}{Bpk^{1.65}}}+d\cdot Bpk^{2}\cdot f^{2}$		
	where B_{pk} expressed in gauss, f expressed in hertz, and:		
	a=1.442E+07, b=1.864E+09, c=1.825E+06, d=5.000E-14		
	B_{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	321 mW/cm³	
	Core Loss (maximum)	369 mW/cm³	
DC Saturation	$\%\mu_i = \frac{1}{a+b\cdot H^{c}}+d$		
	where H expressed in oersteds, and:		
	a=1.000E-02, b=1.566E-06, c=1.807, d=0.000		
	H_{DC}	80 Oe	
	Percent Initial Perm(nom.)	69.9%	
	Percent Initial Perm(min.)	62.6%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	300 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	16	20	26	33	41	52	66	82	103	129
		Rdc(Ω)	2.3 m	4.9 m	9.7 m	20.1 m	40.6 m	80.2 m	161.7 m	326.4 m	644.9 m	1.3	2.6
	Full Winding	Turns	13	20	30	47	73	112	174	269	417	645	998
		Rdc(Ω)	2.5 m	6.1 m	14.6 m	36.3 m	89.7 m	219.0 m	541.0 m	1.3	3.3	8.1	19.9

Micrometals Alloy 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.MicrometalsAPC.com