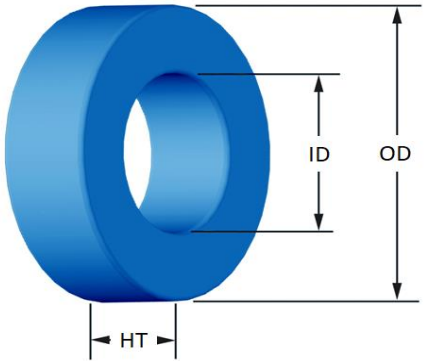
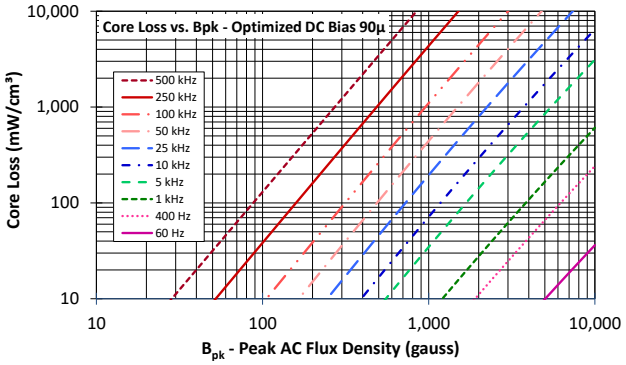
MICROMETALS™
POWDER CORE SOLUTIONS

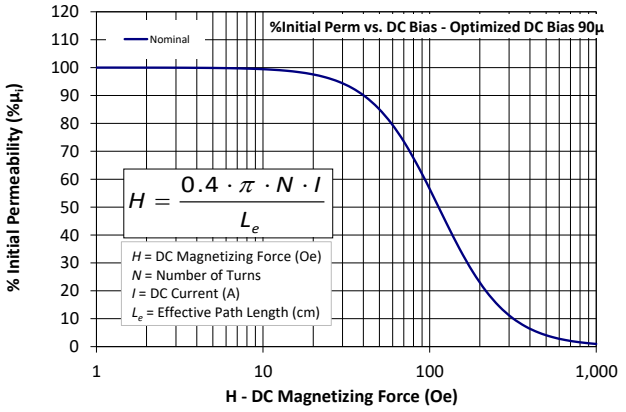
Part Number:	OD-226090-2H305

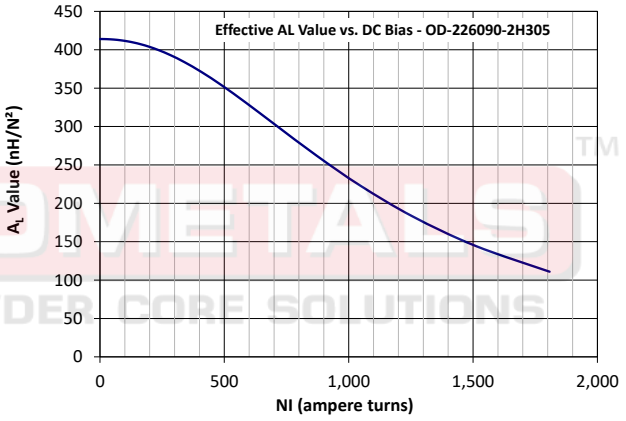
Revision: 2023-Dec-18

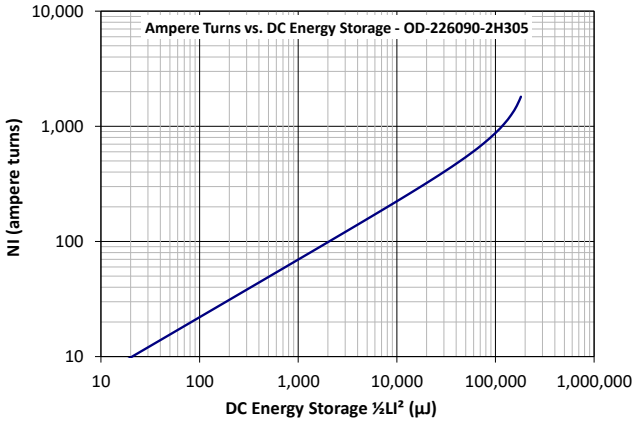


(If coated, Max./Min. includes coating)		mm	in
OD	(nom. - bare core)	57.15	2.250
	(max.)	58.04	2.285
ID	(nom. - bare core)	26.39	1.039
	(min.)	25.58	1.007
HT	(nom. - bare core)	30.48	1.200
	(max.)	31.37	1.235
Mass	(approximate)	420	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	4.57	cm^2
	L_e - Eff. Mag. Path Length	12.506	cm
	V_e - Eff. Core Volume	57.2	cm^3
	WA - Min. Eff. Window Area	5.14	cm^2
	sa - Surface Area	136	cm^2
	mlt - mean length per turn	10.8	cm
Inductance	μ_i(reference)	90	
	A_L value (nominal)	414	nH/N^2
	Test Winding	60 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	1.2	V
	AL tolerance	±8%	
Core Loss	Core Loss$(mW/cm^3)=\frac{f}{\frac{a}{Bpk^3}+\frac{b}{Bpk^{2.3}}+\frac{c}{Bpk^{1.65}}}+d\cdot Bpk^2\cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and:		
	a=1.000E+06, b=7.629E+08, c=4.688E+06, d=4.273E-14		
	B_{pk}	1000	G
	frequency	50 k	Hz
	Core Loss (nominal)	443	mW/cm^3
	Core Loss (maximum)	510	mW/cm^3
DC Saturation	$\%\mu_i \frac{1}{a+b\cdot H^c}+d$		
	where H expressed in oersteds, and:		
	a=1.000E-02, b=4.343E-07, c=2.124, d=0.000		
	H_{DC}	50	Oe
	Percent Initial Perm(nom.)	85.0	%
	Percent Initial Perm(min.)	79.4	%
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	36 Pcs/Box	









Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Single Layer	Turns	19	24	31	39	49	62	78	97	122	152	190
		Rdc(Ω)	4.2 m	8.5 m	17.4 m	34.8 m	69.6 m	140.1 m	280.3 m	554.3 m	1.1	2.2	4.4
	Full Winding	Turns	27	42	64	100	154	239	370	572	886	1,371	2,122
		Rdc(Ω)	6.0 m	14.8 m	35.9 m	89.3 m	218.8 m	539.9 m	1.3	3.3	8.1	19.8	48.8