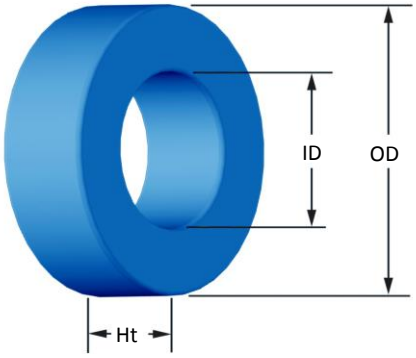
MICROMETALS™
POWDER CORE SOLUTIONS

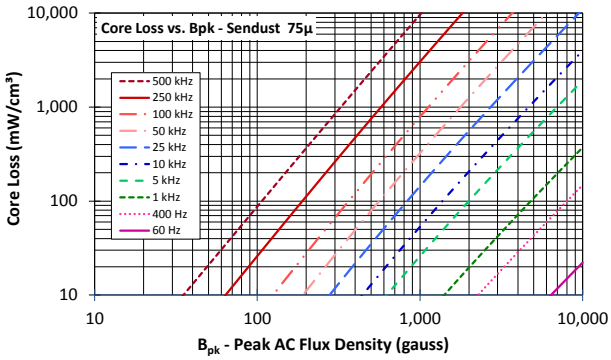
Part Number:	MS-306075-2

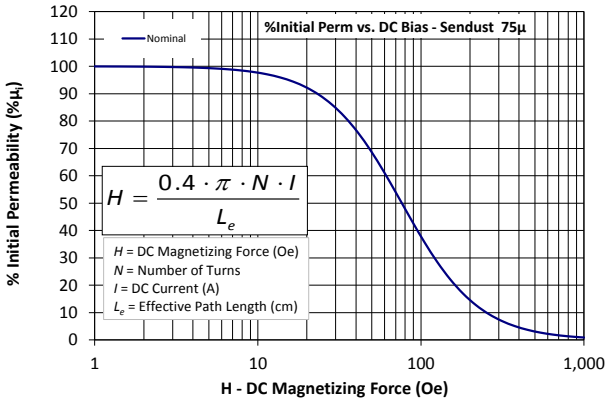
Revision 20191114 - Generated 2019-Nov-14

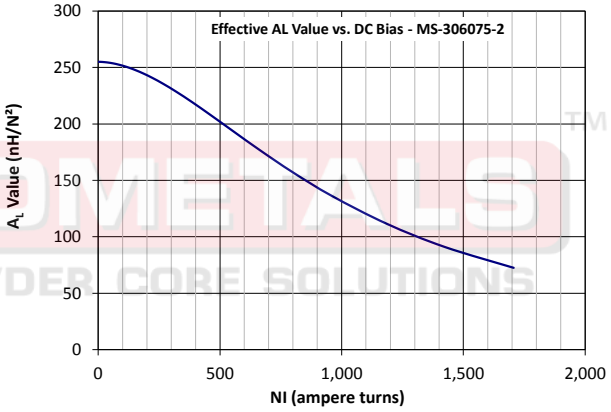


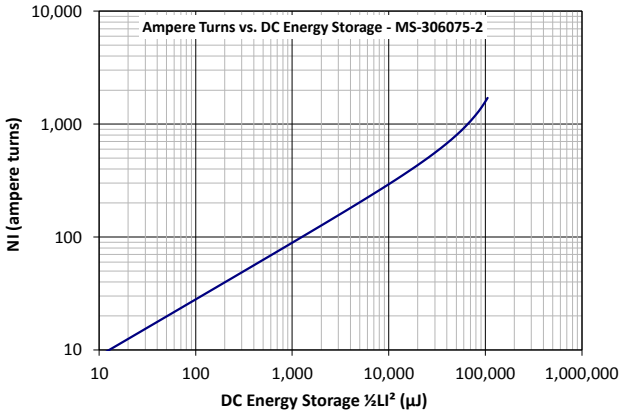
(If coated, Max./Min. includes coating)

OD	(nom. - bare core)	77.80 mm	3.063 in
	(max.)	78.94 mm	3.108 in
ID	(nom. - bare core)	39.34 mm	1.549 in
	(min.)	38.34 mm	1.509 in
HT	(nom. - bare core)	25.85 mm	1.018 in
	(max.)	26.85 mm	1.057 in
Mass	(approximate)	480 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	4.78 cm²	
	L_e - Eff. Mag. Path Length	17 cm	
	V_e - Eff. Core Volume	81.5 cm³	
	WA - Min. Eff. Window Area	11.5 cm²	
	sa - Surface Area	211 cm²	
	mlt - mean length per turn	11.3 cm	
Inductance	μ_i(reference)	75	
	A_L value (nominal)	255 nH/N²	
	Test Winding	N=120, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	2.5 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=7.890E+09, b=7.111E+08, c=8.980E+06, d=2.846E-14		
	B_{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	323 mW/cm³	
	Core Loss (maximum)	372 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=3.414E-06, c=1.841, d=0.000		
	H_{DC}	80 Oe	
	Percent Initial Perm(nom.)	47.9%	
	Percent Initial Perm(min.)	39.6%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	27 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	30	38	47	60	75	94	118	147	184	229	286
		Rdc(Ω)	7.0 m	14.1 m	27.7 m	56.3 m	111.9 m	223.1 m	445.5 m	882.6 m	1.8	3.5	6.9
	Full Winding	Turns	60	94	145	224	347	537	831	1,286	1,990	3,080	4,767
		Rdc(Ω)	14.0 m	34.9 m	85.6 m	210.2 m	517.9 m	1.3	3.1	7.7	19.0	46.8	115.1