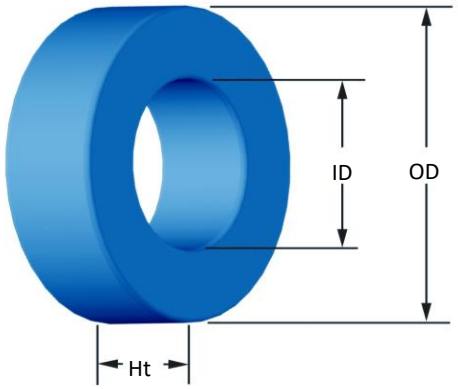
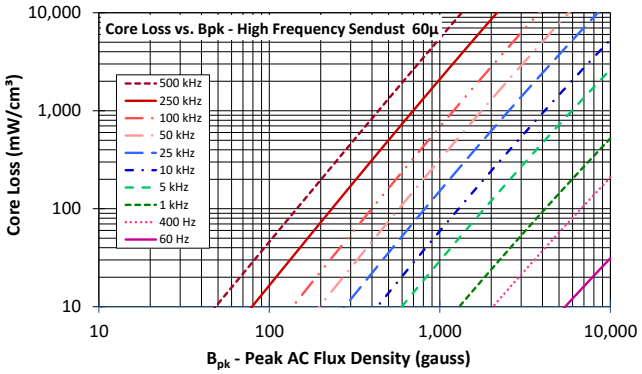
MICROMETALS
ALLOY POWDER CORES

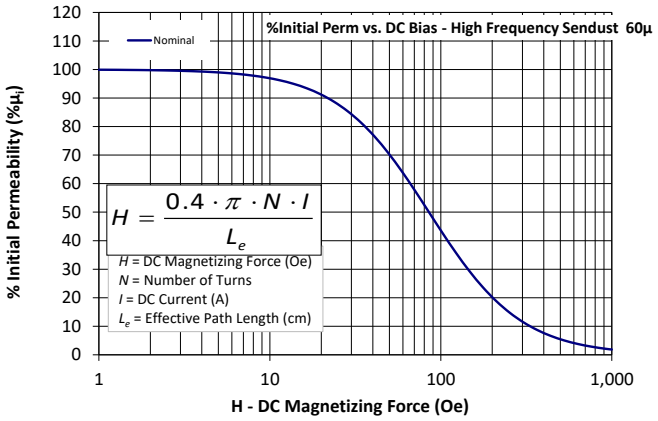
Part Number:	SH-028060-8

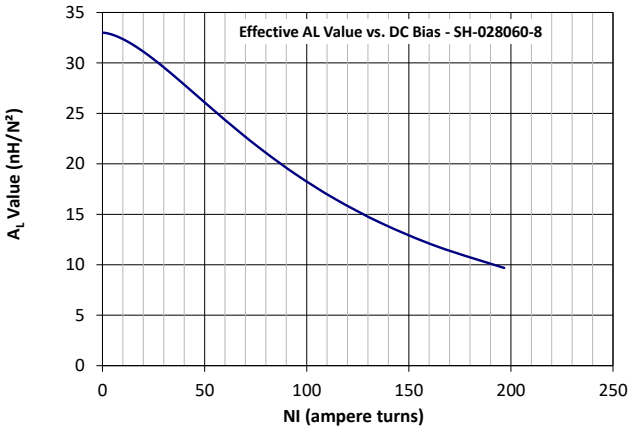
Revision 20170403 - Generated 2017-Apr-03

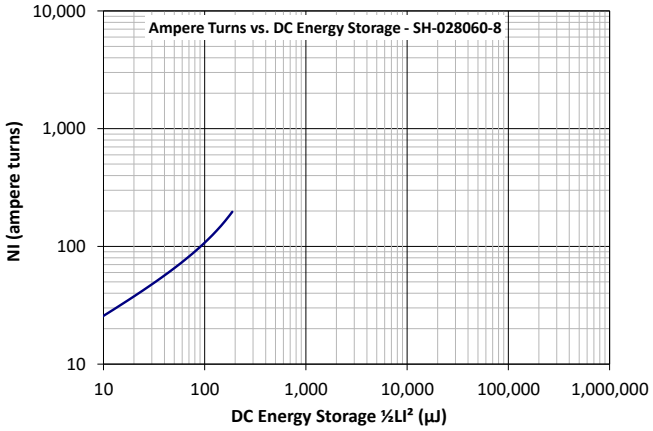


OD	(nom. - bare core)	7.04 mm	0.277 in
	(max. - after coating)	7.67 mm	0.302 in
ID	(nom. - bare core)	3.96 mm	0.156 in
	(min. - after coating)	3.45 mm	0.136 in
Ht	(nom. - bare core)	5.08 mm	0.200 in
	(max. - after coating)	5.72 mm	0.225 in
Mass	(approximate)	0.70 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0750 cm²	
	L_e - Eff. Mag. Path Length	1.68 cm	
	V_e - Eff. Core Volume	0.126 cm³	
	WA - Min. Eff. Window Area	0.0935 cm²	
	sa - Surface Area	2.80 cm²	
	mlt - mean length per turn	1.74 cm	
Inductance	μ_i(reference)	60	
	A_L value (nominal)	33 nH/N²	
	Test Winding	N=40, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.013 V	
	AL tolerance	±12%	
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=1.000E+06, b=8.801E+08, c=5.421E+06, d=1.033E-14		
	B_{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	317 mW/cm³	
	Core Loss (maximum)	365 mW/cm³	
DC Saturation	$\%\mu_i \cdot \frac{1}{a+b\cdot H^c}+d$		
	where H expressed in oersteds, and:		
	a=1.000E-02, b=7.724E-06, c=1.612, d=0.000		
	H_{DC}	100 Oe	
	Percent Initial Perm(nom.)	43.6%	
	Percent Initial Perm(min.)	36.5%	
Coating/Pkg	Coating Type:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	12,600 Pcs/Box	









Winding Table	**Wire Size**	AWG	22	24	26	28	30	32	34	36	38	40	42
		mm	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063
	Single Layer	Turns	11	14	18	23	29	37	47	59	75	93	117
		Rdc(Ω)	10.1 m	20.5 m	41.9 m	85.1 m	170.7 m	346.3 m	699.6 m	1.4	2.8	5.6	11.1
	Full Winding	Turns	10	16	25	39	60	92	143	222	343	531	821
		Rdc(Ω)	9.2 m	23.4 m	58.2 m	144.3 m	353.1 m	861.1 m	2.1	5.3	12.9	31.8	78.2

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