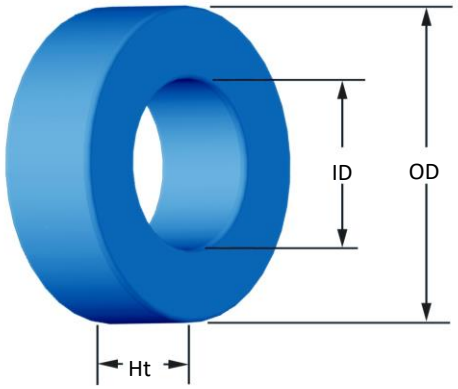
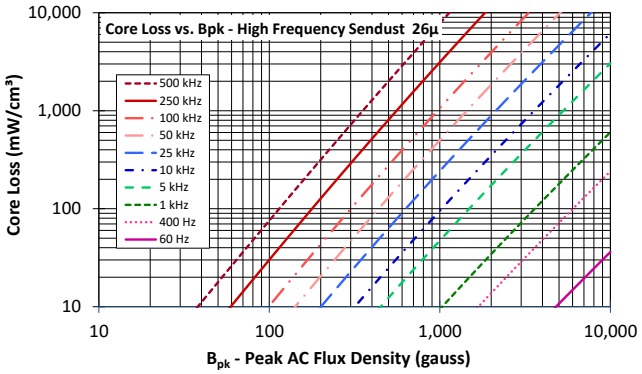
MICROMETALS
ALLOY POWDER CORES

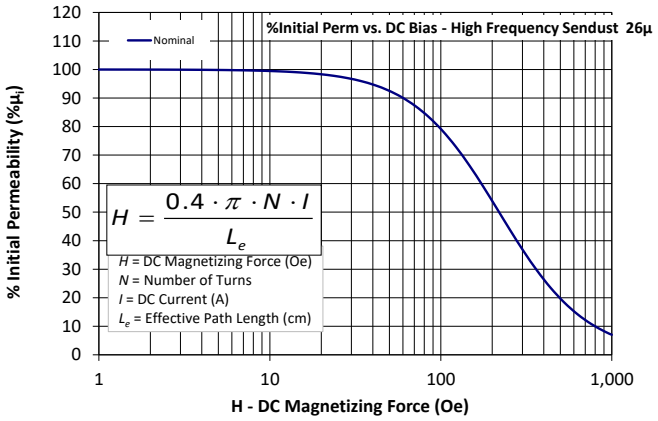
Part Number:	SH-401026-2

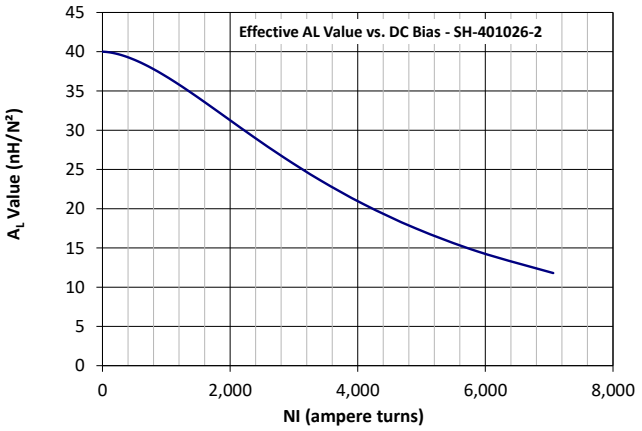
Revision 20170403 - Generated 2017-Apr-03

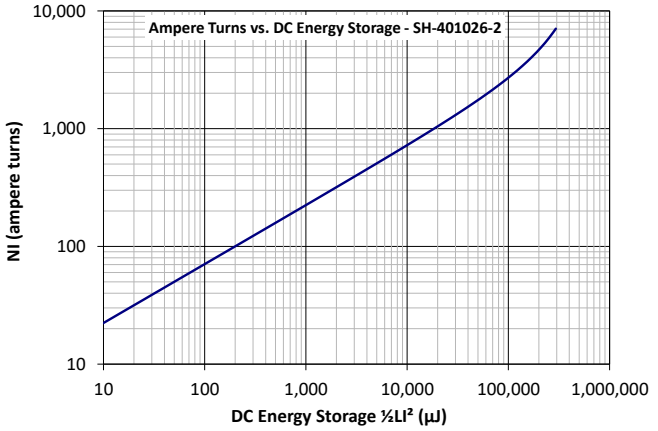


OD	(nom. - bare core)	101.60 mm	4.000 in
	(max. - after coating)	102.87 mm	4.050 in
ID	(nom. - bare core)	57.15 mm	2.250 in
	(min. - after coating)	55.75 mm	2.195 in
Ht	(nom. - bare core)	13.59 mm	0.535 in
	(max. - after coating)	14.86 mm	0.585 in
Mass	(approximate)	370 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	2.97 cm²	
	L_e - Eff. Mag. Path Length	24.271 cm	
	V_e - Eff. Core Volume	72.1 cm³	
	WA - Min. Eff. Window Area	24.4 cm²	
	sa - Surface Area	293 cm²	
	mlt - mean length per turn	10.5 cm	
Inductance	μ_i(reference)	26	
	A_L value (nominal)	40 nH/N²	
	Test Winding	N=140, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	1.8 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=1.000E+06, b=3.287E+08, c=5.779E+06, d=1.240E-14		
	B_{pk}	500 G	
	frequency	100 kHz	
	Core Loss (nominal)	277 mW/cm³	
	Core Loss (maximum)	318 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=1.042E-06, c=1.701, d=0.000		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	53.9%	
	Percent Initial Perm(min.)	46.1%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	16 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	44	56	70	88	110	138	172	215	268	335	417
		Rdc(Ω)	9.5 m	19.2 m	38.1 m	76.2 m	151.5 m	302.3 m	599.2 m	1.2	2.4	4.7	9.3
	Full Winding	Turns	128	198	306	474	733	1,135	1,756	2,719	4,208	6,512	10,079
		Rdc(Ω)	27.6 m	67.8 m	166.6 m	410.5 m	1.0	2.5	6.1	15.1	37.1	91.3	224.6

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