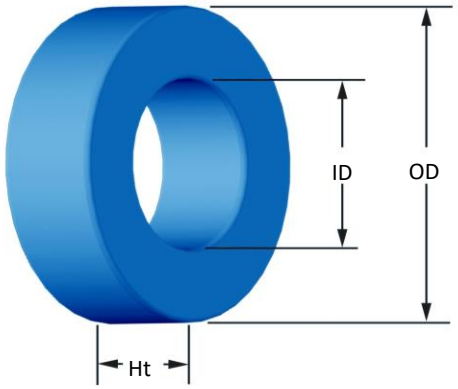
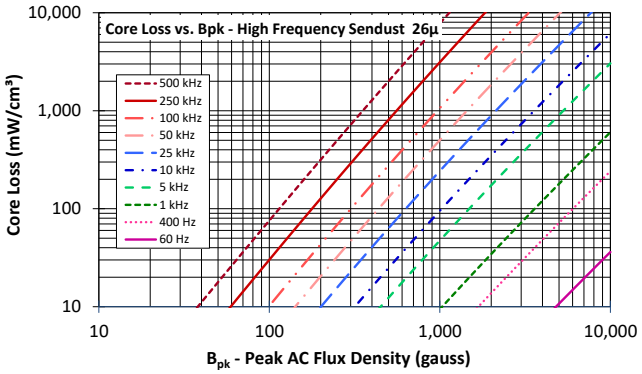
MICROMETALS
ALLOY POWDER CORES

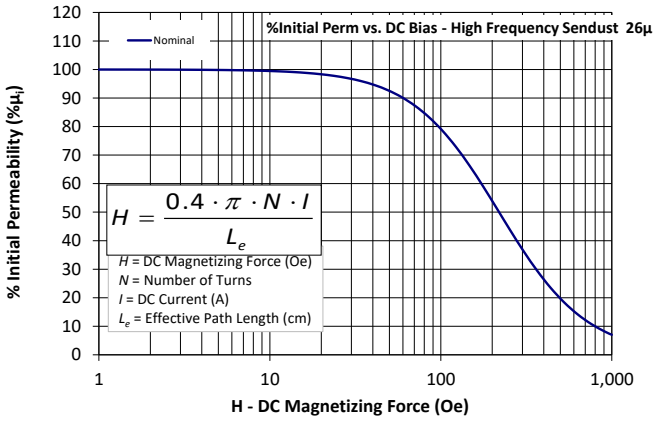
Part Number:	SH-044026-2

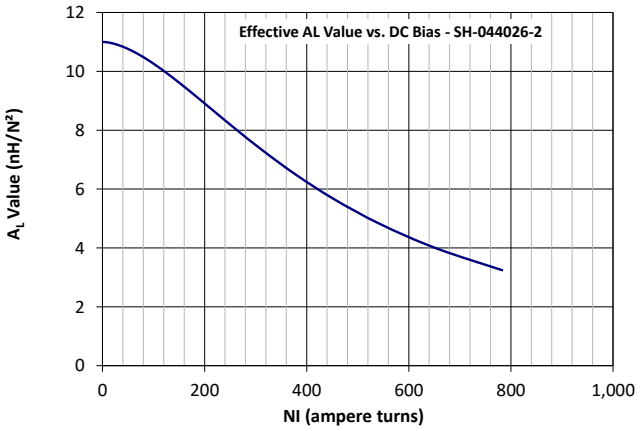
Revision 20170403 - Generated 2017-Apr-03

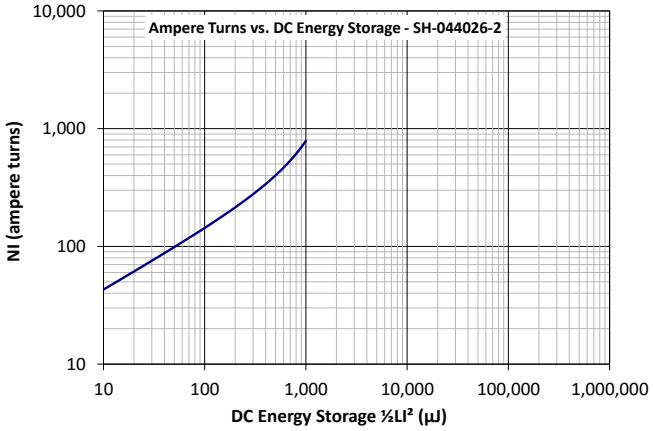


OD	(nom. - bare core)	11.18 mm	0.440 in
	(max. - after coating)	11.89 mm	0.468 in
ID	(nom. - bare core)	6.35 mm	0.250 in
	(min. - after coating)	5.89 mm	0.232 in
Ht	(nom. - bare core)	3.96 mm	0.156 in
	(max. - after coating)	4.72 mm	0.186 in
Mass	(approximate)	1.3 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0906 cm²	
	L_e - Eff. Mag. Path Length	2.69 cm	
	V_e - Eff. Core Volume	0.244 cm³	
	WA - Min. Eff. Window Area	0.272 cm²	
	sa - Surface Area	5.10 cm²	
	mlt - mean length per turn	1.84 cm	
Inductance	μ_i(reference)	26	
	A_L value (nominal)	11 nH/N²	
	Test Winding	N=60, #30 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.024 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=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	$\%\mu_i \cdot \frac{1}{a+b\cdot H^c}+d$		
	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	9,000 Pcs/Box	









Winding Table	**Wire Size**	AWG	18	20	22	24	26	28	30	32	34	36	38
		mm	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100
	Single Layer	Turns	12	16	20	26	33	42	52	66	83	103	129
		Rdc(Ω)	4.6 m	9.8 m	19.5 m	40.2 m	81.2 m	164.4 m	323.6 m	653.3 m	1.3	2.6	5.1
	Full Winding	Turns	13	20	30	47	73	113	174	270	417	646	999
		Rdc(Ω)	5.0 m	12.2 m	29.2 m	72.7 m	179.6 m	442.2 m	1.1	2.7	6.6	16.2	39.8

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