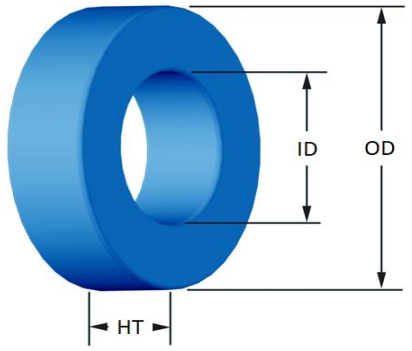
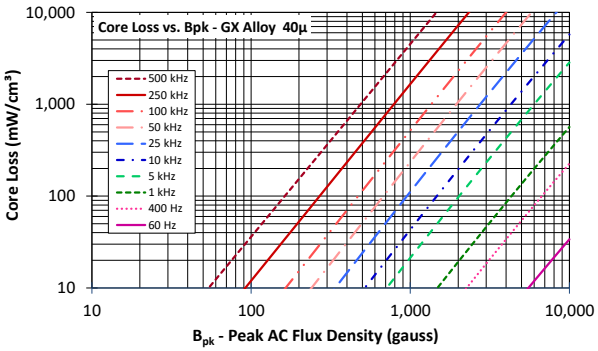
MICROMETALS™
POWDER CORE SOLUTIONS

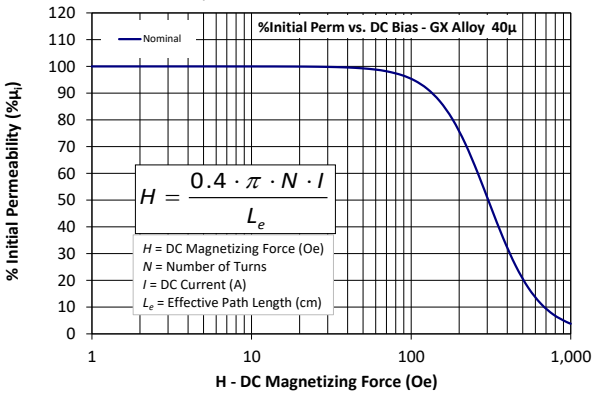
Part Number:	GX-107040-2

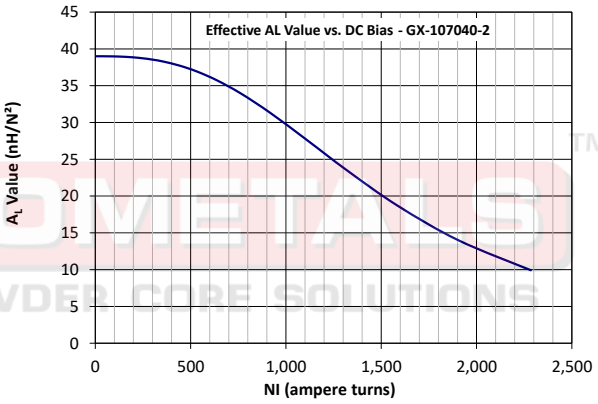
Revision: 2026-Mar-11

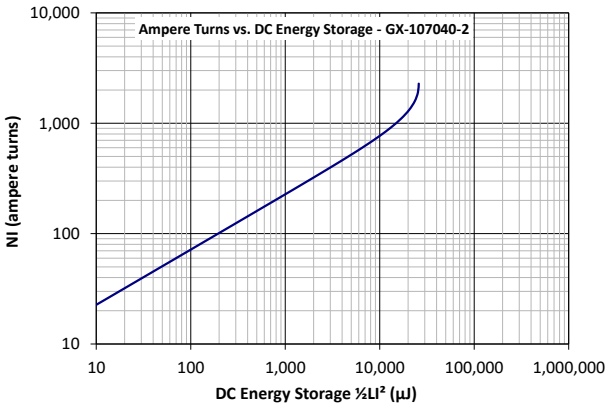


(If coated, Max./Min. includes coating)		mm	in
OD	(nom. - bare core)	26.92	1.060
	(max.)	27.69	1.090
ID	(nom. - bare core)	14.73	0.580
	(min.)	14.10	0.555
HT	(nom. - bare core)	8.64	0.340
	(max.)	9.45	0.372
Mass	(approximate)	24	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.497	cm²
	L_e - Eff. Mag. Path Length	6.35	cm
	V_e - Eff. Core Volume	3.16	cm³
	WA - Min. Eff. Window Area	1.56	cm²
	sa - Surface Area	26.3	cm²
	mlt - mean length per turn	3.95	cm
Inductance	μ_i(reference)	40	
	A_L value (nominal)	39	nH/N²
	Test Winding	80 Turns	AWG# 26
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.18	V
	AL tolerance	±8%	
Core Loss	$\text{Core Loss(mW/cm}^3\text{)} = \frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and:		
	a=1.0000E+06, b=1.6227E+09, c=2.9772E+06, d=9.6766E-15		
	B_{pk}	1000	G
	frequency	50 k	Hz
	Core Loss (nominal)	235	mW/cm³
	Core Loss (maximum)	328	mW/cm³
DC Saturation	$\%\mu_i \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	a=1.0000E-02, b=1.7863E-09, c=2.7173, d=0.0000		
	H_{DC}	200	Oe
	Percent Initial Perm(nom.)	75.8	%
	Percent Initial Perm(min.)	65.6	%
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	630 Pcs/Box	









Winding Table	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Single Layer	Turns	12	16	20	26	33	41	52	66	82	103	129
		Rdc(Ω)	1.6 m	3.3 m	6.5 m	13.5 m	27.3 m	53.9 m	108.8 m	219.6 m	433.9 m	866.9 m	1.7
	Full Winding	Turns	13	20	30	47	73	112	174	269	417	645	998
		Rdc(Ω)	1.7 m	4.1 m	9.8 m	24.4 m	60.4 m	147.3 m	364.0 m	895.1 m	2.2	5.4	13.4

Special Spec: Preliminary Material Specification.