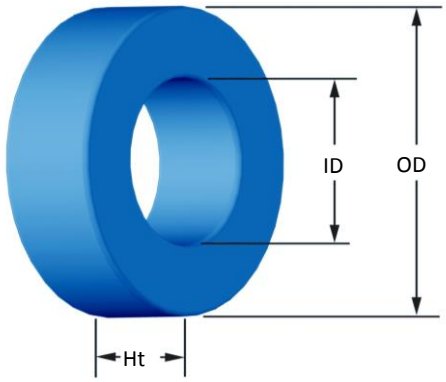
EN: This Datasheet/Document is presented by the manufacturer.

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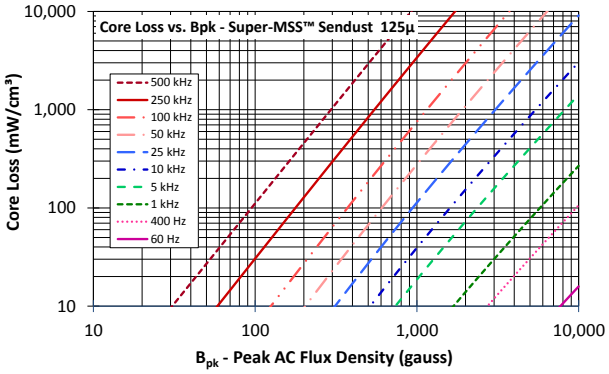
MICROMETALS
ARNOLD POWDER CORES

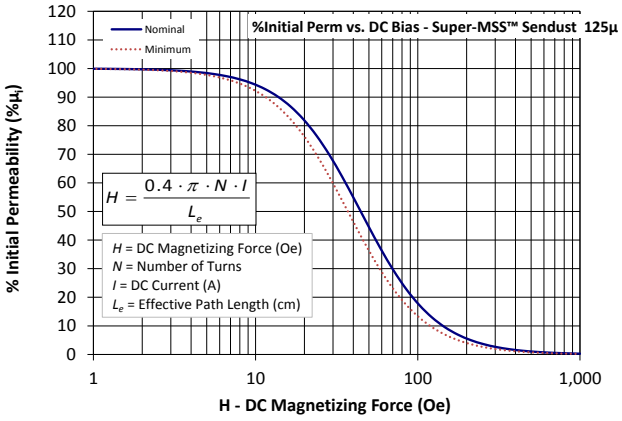
Part Number:	MS-157125-2

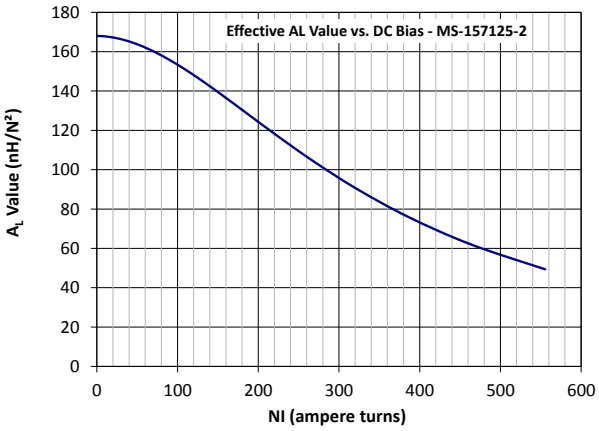
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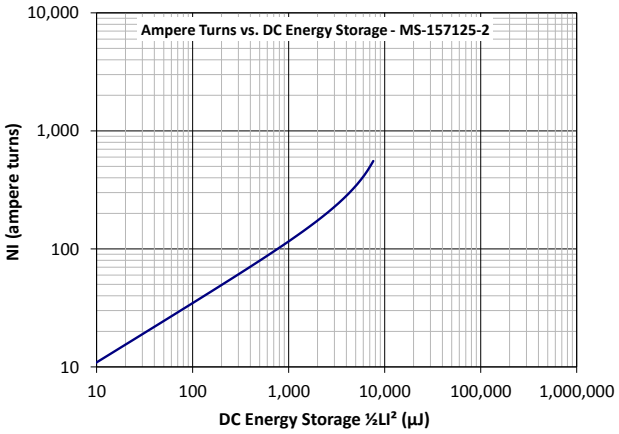


OD	(nom. - bare core)	39.88 mm	1.570 in
	(max. - after coating)	40.69 mm	1.602 in
ID	(nom. - bare core)	24.13 mm	0.950 in
	(min. - after coating)	23.32 mm	0.918 in
Ht	(nom. - bare core)	14.48 mm	0.570 in
	(max. - after coating)	15.37 mm	0.605 in
Mass	(approximate)	63 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.07 cm²	
	L_e - Eff. Mag. Path Length	9.85 cm	
	V_e - Eff. Core Volume	10.5 cm³	
	WA - Min. Eff. Window Area	4.27 cm²	
	sa - Surface Area	60.2 cm²	
	mlt - mean length per turn	5.98 cm	
Inductance	μ_i(reference)	125	
	A_L value (nominal)	168 nH/N²	
	Test Winding	N=70, #20 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.33 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=1.394E+10, b=1.034E+09, c=1.244E+07, d=4.007E-14		
	B_{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	276 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=7.884E-06, c=1.883, d=0.000		
	H_{DC}	40 Oe	
	Percent Initial Perm(nom.)	55.0%	
	Percent Initial Perm(min.)	46.4%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	216 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	17	22	28	35	45	56	70	88	111	138	173
		Rdc(Ω)	2.1 m	4.3 m	8.7 m	17.3 m	35.4 m	70.0 m	139.2 m	278.3 m	558.3 m	1.1	2.2
	Full Winding	Turns	22	35	54	83	128	199	307	476	736	1,139	1,764
		Rdc(Ω)	2.7 m	6.8 m	16.8 m	41.0 m	100.6 m	248.8 m	610.5 m	1.5	3.7	9.1	22.4

Micrometals Arnold 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.MicrometalsArnoldPowderCores.com