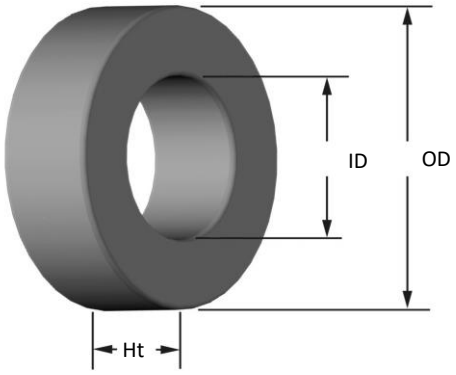
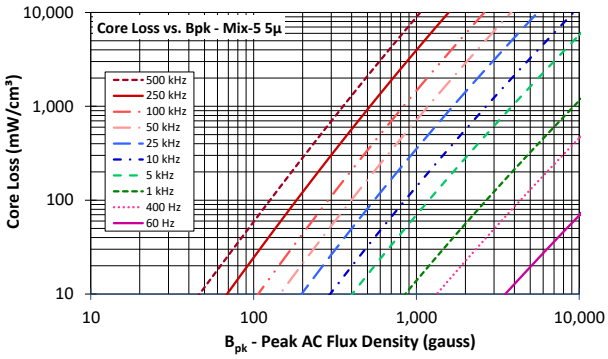
MICROMETALS™
POWDER CORE SOLUTIONS

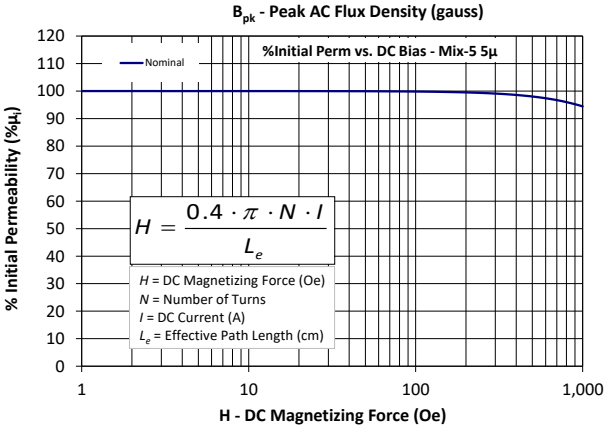
Part Number:	T72-5

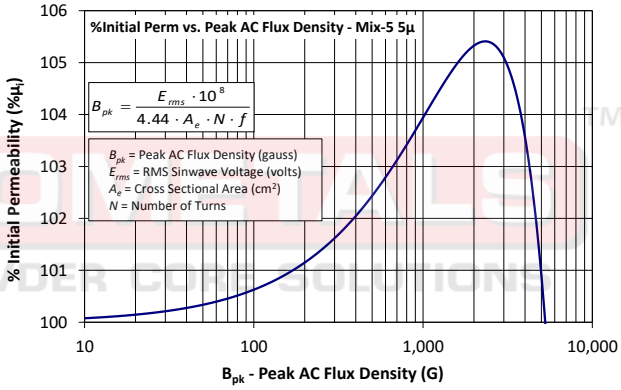
Revision 2024-Jul-8 - Generated 2024-Jul-8

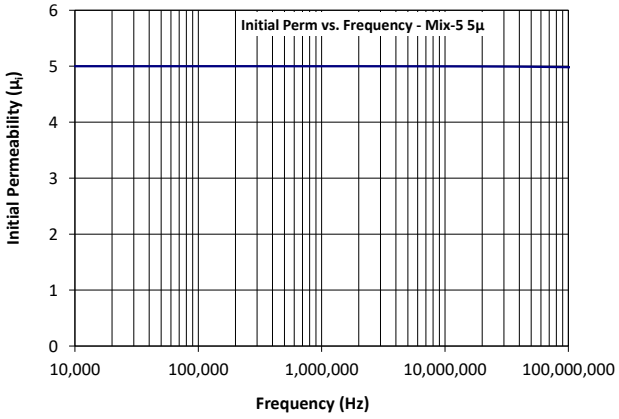


OD	(nom. - bare core)	18.29 mm	0.720 in
	(max. - including coating, if any)	18.80 mm	0.740 in
ID	(nom. - bare core)	7.11 mm	0.280 in
	(min. - including coating, if any)	6.60 mm	0.260 in
HT	(nom. - bare core)	6.60 mm	0.260 in
	(max. - including coating, if any)	7.11 mm	0.280 in
Mass	(approximate)	7.0 grams	
Magnetic Dimensions	Ae - Eff. Mag. Cross Section	0.349 cm²	
	Le - Eff. Mag. Path Length	4.01 cm	
	Ve - Eff. Core Volume	1.40 cm³	
	WA - Min. Eff. Window Area	0.343 cm²	
	sa - Surface Area	11.8 cm²	
	mlt - mean length per turn	2.97 cm	
Inductance	µi(reference)	5	
	AL value (nominal)	5.5 nH/N²	
	Test Winding	N=50, #28 AWG	
	Test Frequency	1 MHz	
	Voltage on Agilent 4284A	1.0 V	
	AL tolerance	±5%	
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=4.00E+09, b=3.00E+08, c=2.70E+06, d=8.00E-15		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	19 mW/cm³	
	Core Loss (maximum)	22 mW/cm³	
DC Saturation	$\%\mu_i = \frac{1}{a+b\cdot H^{c}}+d$		
	where H expressed in oersteds, and:		
	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00		
	Hdc	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
	Percent Initial Perm(min.)	99.4%	
Coating/Pkg	Coating Type:	Green/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	2,000 Pcs/Box	









Winding Table	**Wire Size**	AWG	16	18	20	22	24	26	28	30	32	34	36
		mm	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125
	Single Layer	Turns	11	14	18	23	29	37	47	59	74	93	116
		Rdc(Ω)	4.3 m	8.7 m	17.8 m	36.1 m	72.5 m	147.1 m	297.1 m	593.2 m	1.2	2.4	4.7
	Full Winding	Turns	10	16	25	38	59	91	141	219	339	524	812
		Rdc(Ω)	3.9 m	9.9 m	24.7 m	59.7 m	147.5 m	361.7 m	891.4 m	2.2	5.4	13.3	32.8