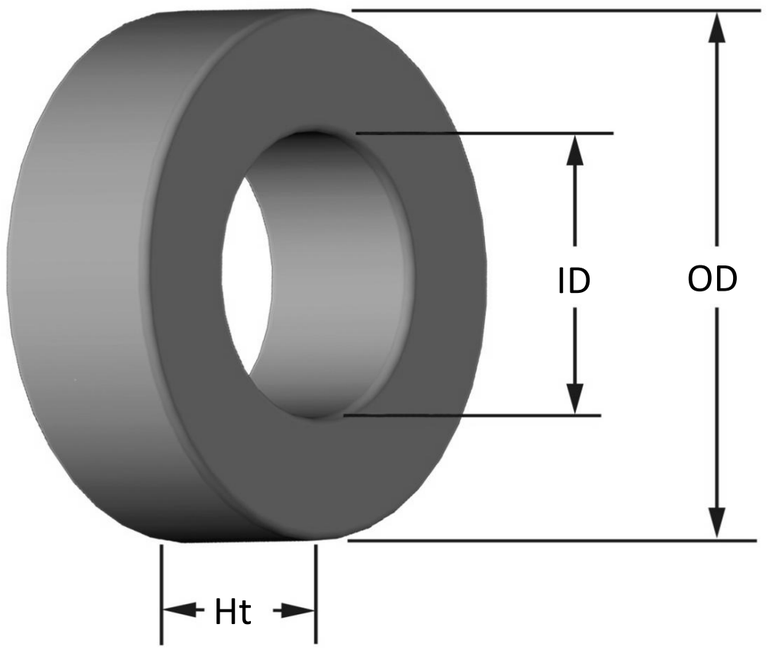
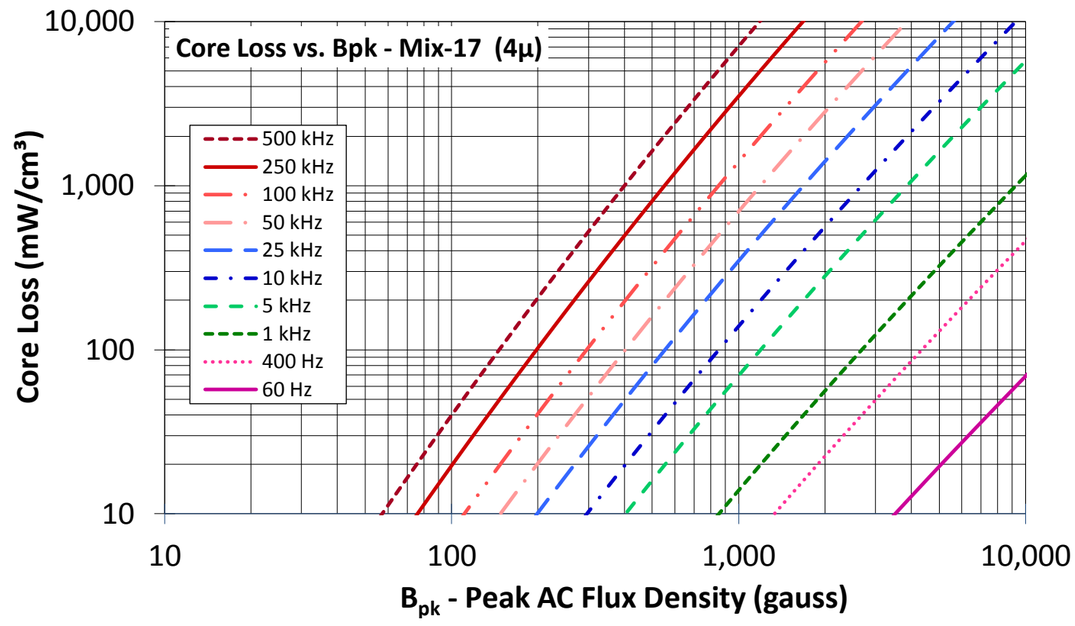
MICROMETALS™
POWDER CORE SOLUTIONS

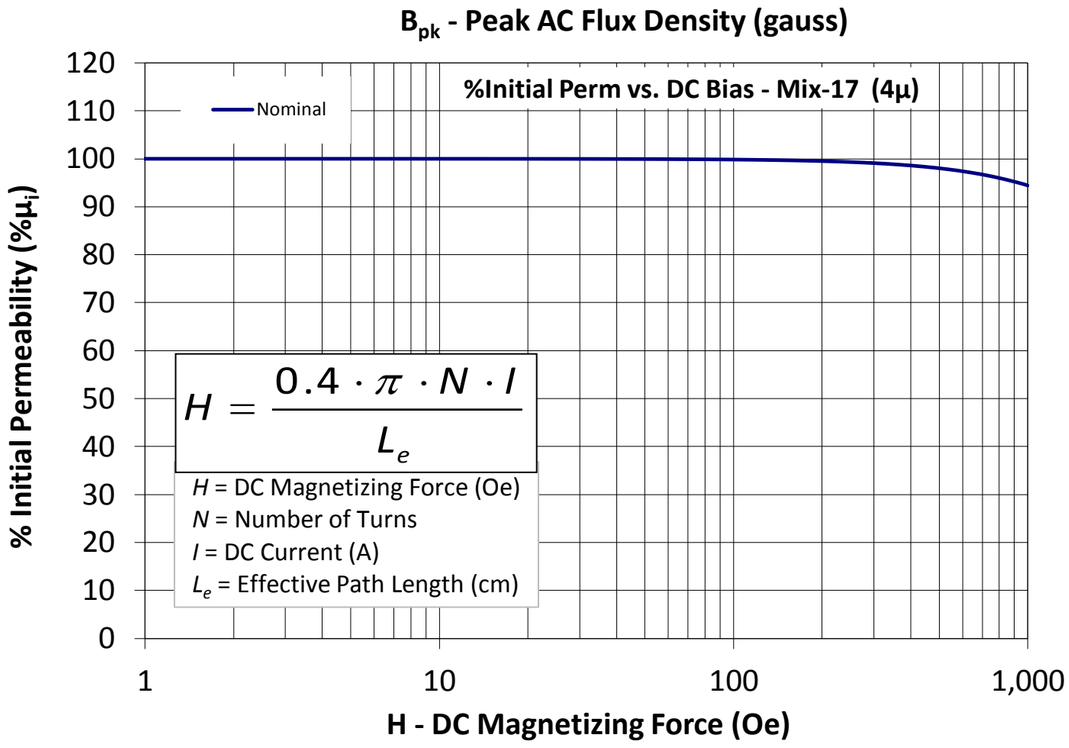
Part Number:	T25-17

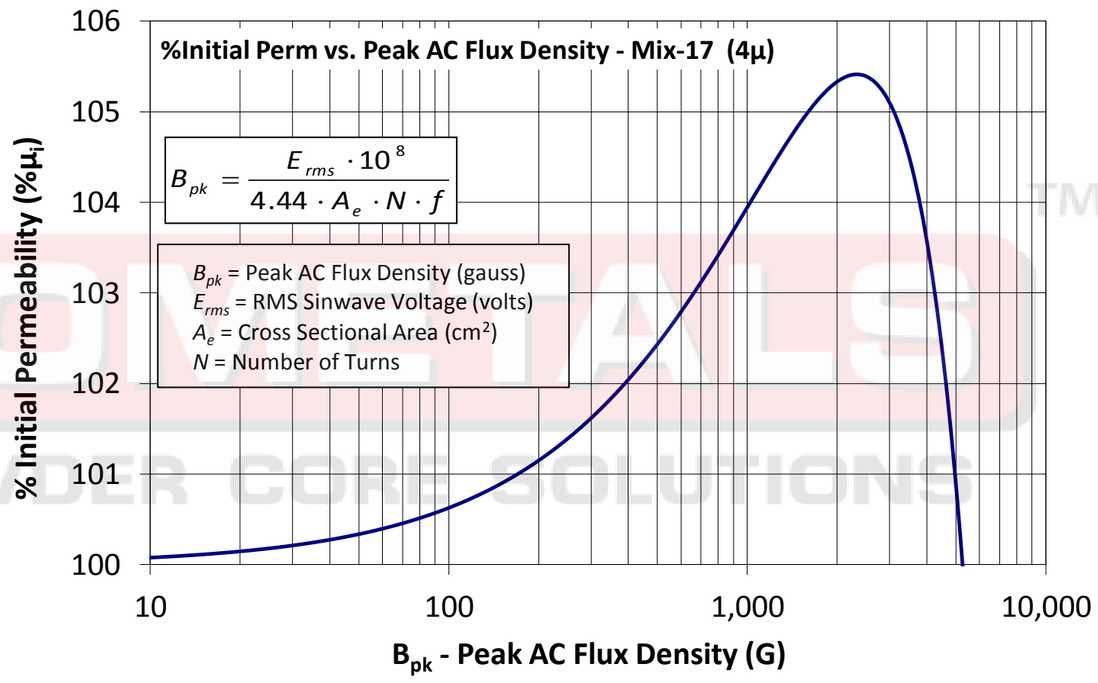
Revision 20190524 - Generated 2019-May-30

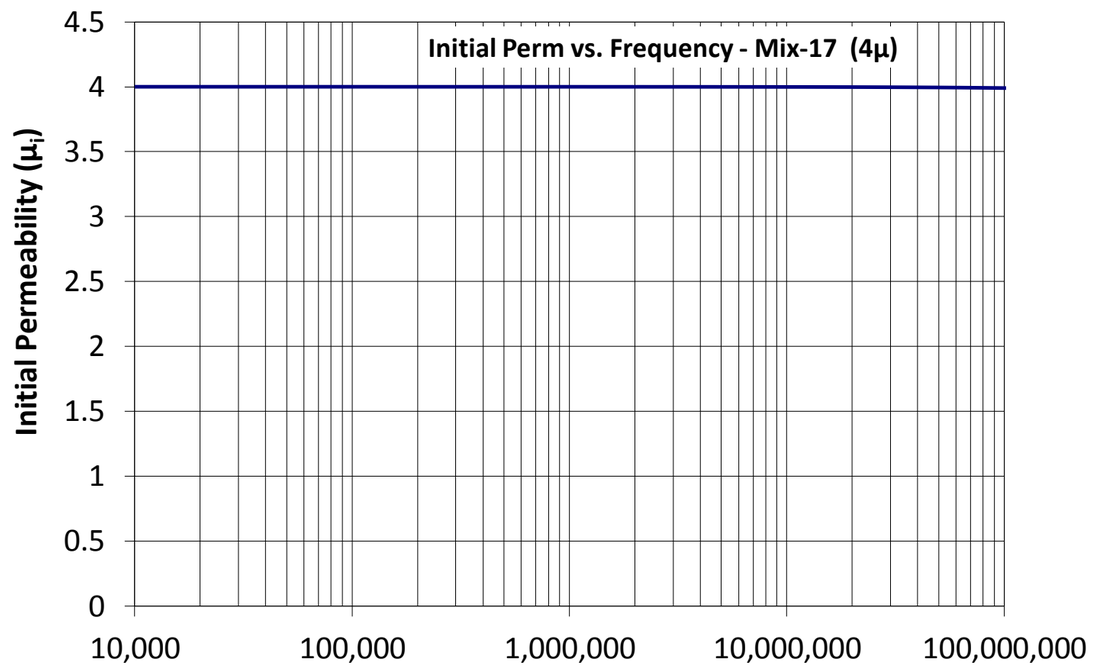


OD	(nom. - bare core)	6.48 mm	0.255 in
	(max. - after coating)	6.86 mm	0.270 in
ID	(nom. - bare core)	3.05 mm	0.120 in
	(min. - after coating)	2.67 mm	0.105 in
Ht	(nom. - bare core)	2.44 mm	0.096 in
	(max. - after coating)	2.95 mm	0.116 in
Mass	(approximate)	0.26 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0370 cm²	
	L_e - Eff. Mag. Path Length	1.50 cm	
	V_e - Eff. Core Volume	0.0550 cm³	
	WA - Min. Eff. Window Area	0.0559 cm²	
	sa - Surface Area	1.68 cm²	
	mlt - mean length per turn	1.14 cm	
Inductance	μ_i(reference)	4	
	A_L value (nominal)	1.2 nH/N²	
	Test Winding	N=50, #34 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.82 V	
	A_L tolerance	±5%	
Core Loss & Q	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=4.40E-16		
	Q test winding	N=9, #24 AWG	
	Q frequency	60 MHz	
	Q min on HP4342A	104	
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		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
	Percent Initial Perm(min.)	99.4%	
Coating/Pkg	Coating Type:	Blue/Yellow Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	20,000 Pcs/Box	









Winding Table												
Wire Size	AWG	24	26	28	30	32	34	36	38	40	42	44
	mm	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050
Single Layer	Turns	10	13	17	22	28	36	45	57	72	90	112
	Rdc(Ω)	9.6 m	19.9 m	41.3 m	85.0 m	172.1 m	351.9 m	699.6 m	1.4	2.8	5.6	11.1
Full Winding	Turns	10	15	23	36	55	86	132	205	317	491	760
	Rdc(Ω)	9.6 m	22.9 m	55.9 m	139.1 m	338.1 m	840.7 m	2.1	5.1	12.5	30.7	75.6

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