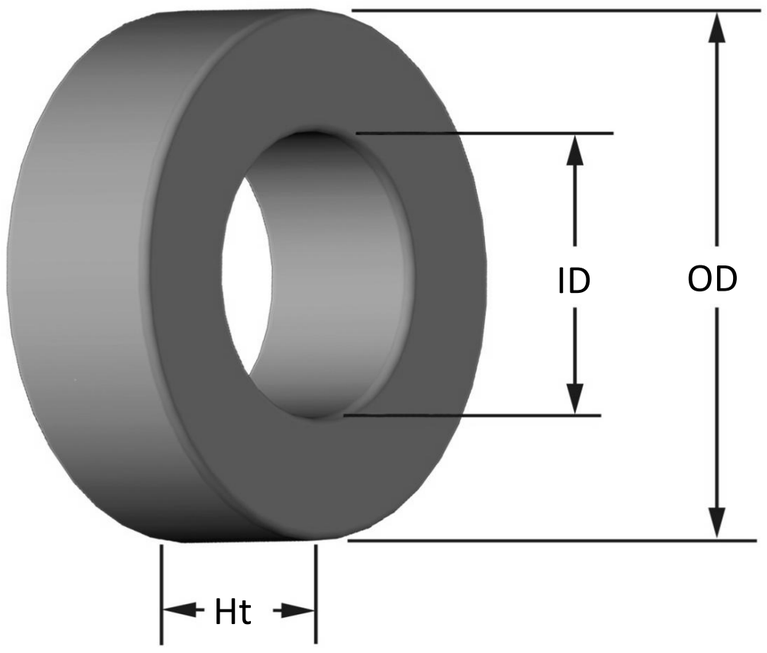
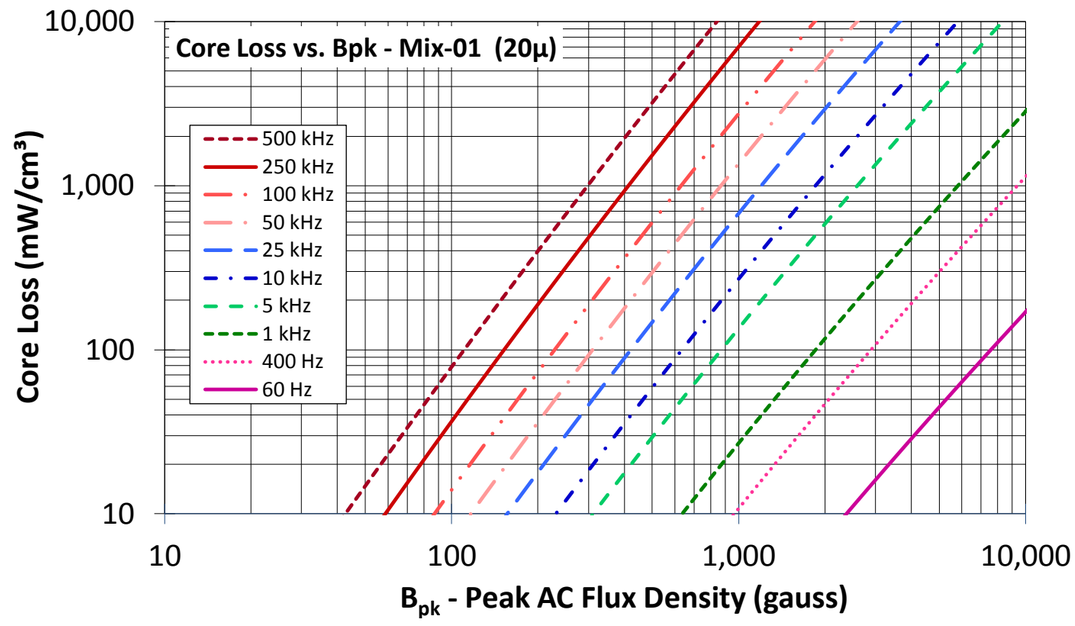
MICROMETALS™
POWDER CORE SOLUTIONS

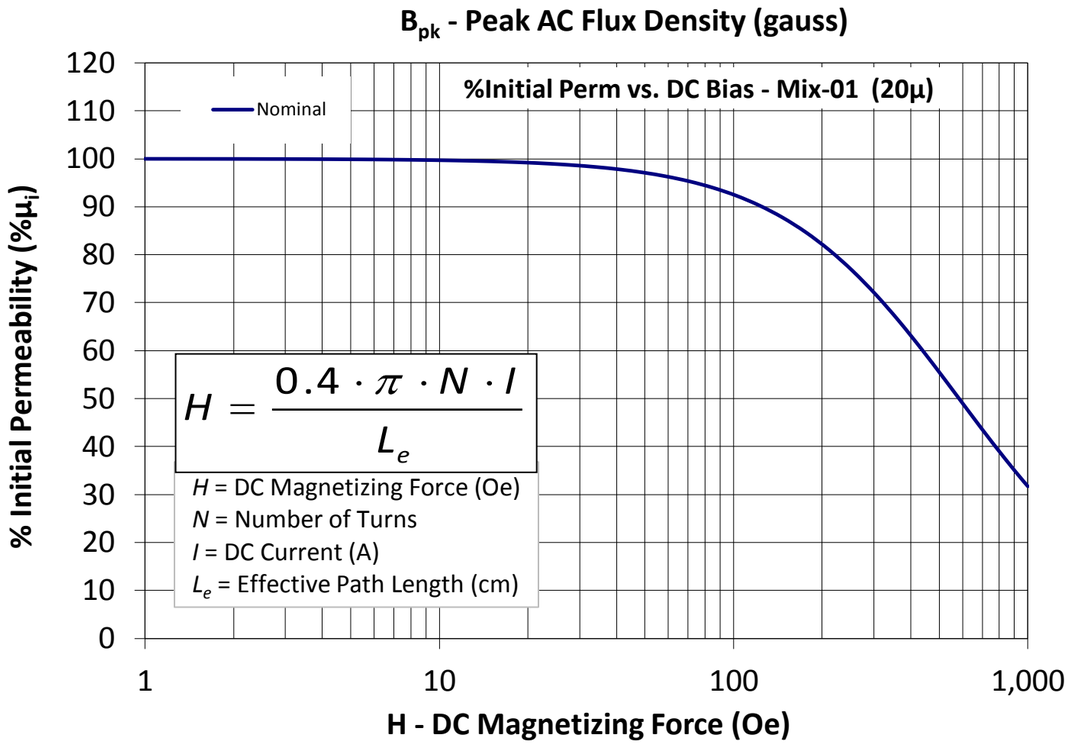
Part Number:	T10-1

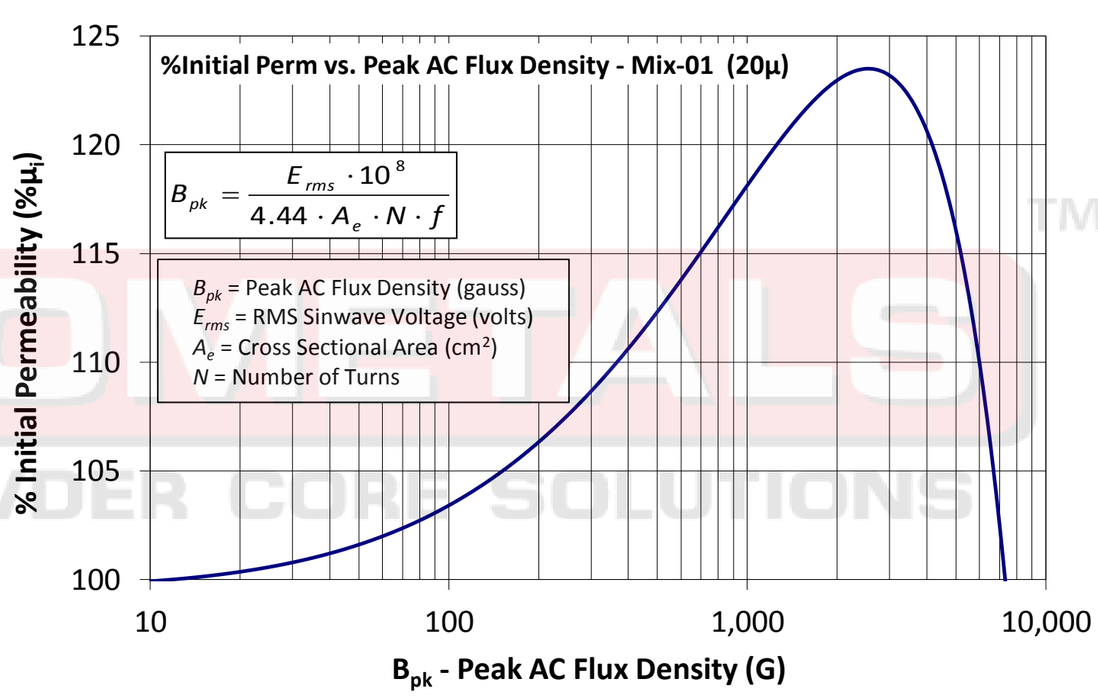
Revision 20190524 - Generated 2019-May-30

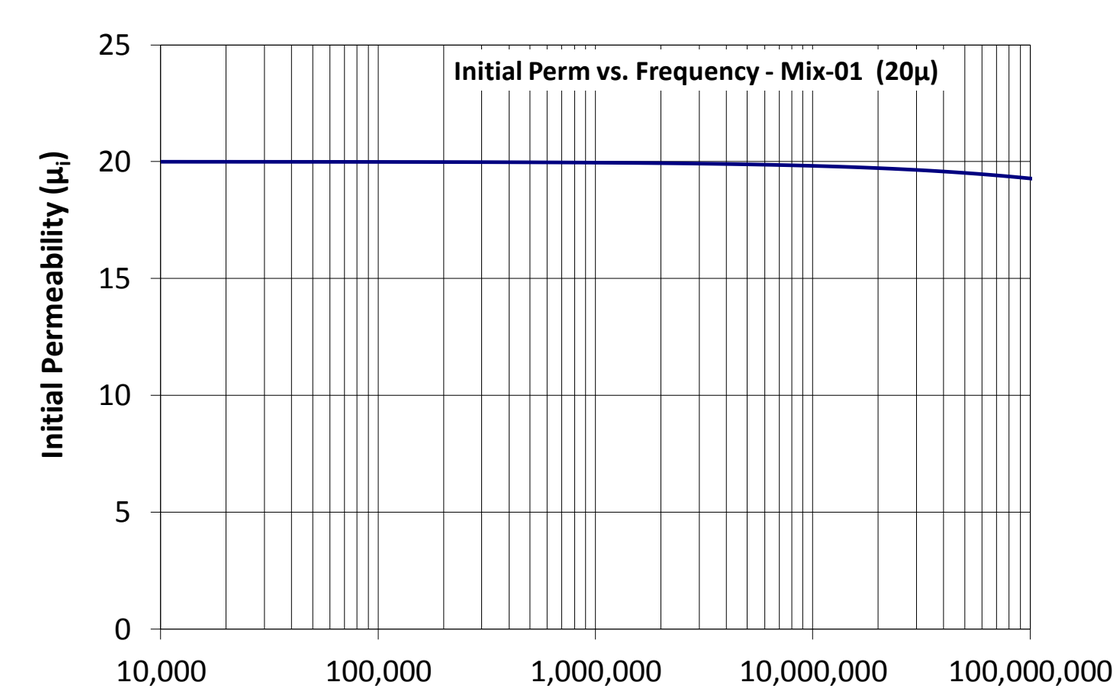


OD	(nom. - bare core)	2.46 mm	0.097 in
	(max. - after coating)	2.59 mm	0.102 in
ID	(nom. - bare core)	1.12 mm	0.044 in
	(min. - after coating)	0.99 mm	0.039 in
Ht	(nom. - bare core)	0.76 mm	0.030 in
	(max. - after coating)	0.89 mm	0.035 in
Mass	(approximate)	0.02 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.00450 cm²	
	L_e - Eff. Mag. Path Length	0.560 cm	
	V_e - Eff. Core Volume	0.00250	
	WA - Min. Eff. Window Area	0.00771 cm²	
	sa - Surface Area	0.219 cm²	
	mlt - mean length per turn	0.387 cm	
Inductance	μ_i(reference)	20	
	A_L value (nominal)	3.2 nH/N²	
	Test Winding	N=25, #40 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.050 V	
	A_L tolerance	±10%	
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=1.90E+09, b=2.00E+08, c=9.00E+05, d=4.30E-15		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	31 mW/cm³	
	Core Loss (maximum)	36 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=1.14E-06, c=1.43, d=0.00		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	82.2%	
	Percent Initial Perm(min.)	78.0%	
Coating/Pkg	Coating Type:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	250,000 Pcs/Box	









Winding Table	**Wire Size**	AWG	34	36	38	40	42	44	#N/A	#N/A	#N/A	#N/A	#N/A
		mm	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A	#N/A	#N/A
	Single Layer	Turns	12	15	19	25	32	40	#N/A	#N/A	#N/A	#N/A	#N/A
		Rdc(Ω)	39.8 m	79.1 m	159.4 m	333.5 m	679.0 m	1.3	#N/A	#N/A	#N/A	#N/A	#N/A
	Full Winding	Turns	12	18	28	44	68	105	#N/A	#N/A	#N/A	#N/A	#N/A
		Rdc(Ω)	39.8 m	94.9 m	234.9 m	587.0 m	1.4	3.5	#N/A	#N/A	#N/A	#N/A	#N/A

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