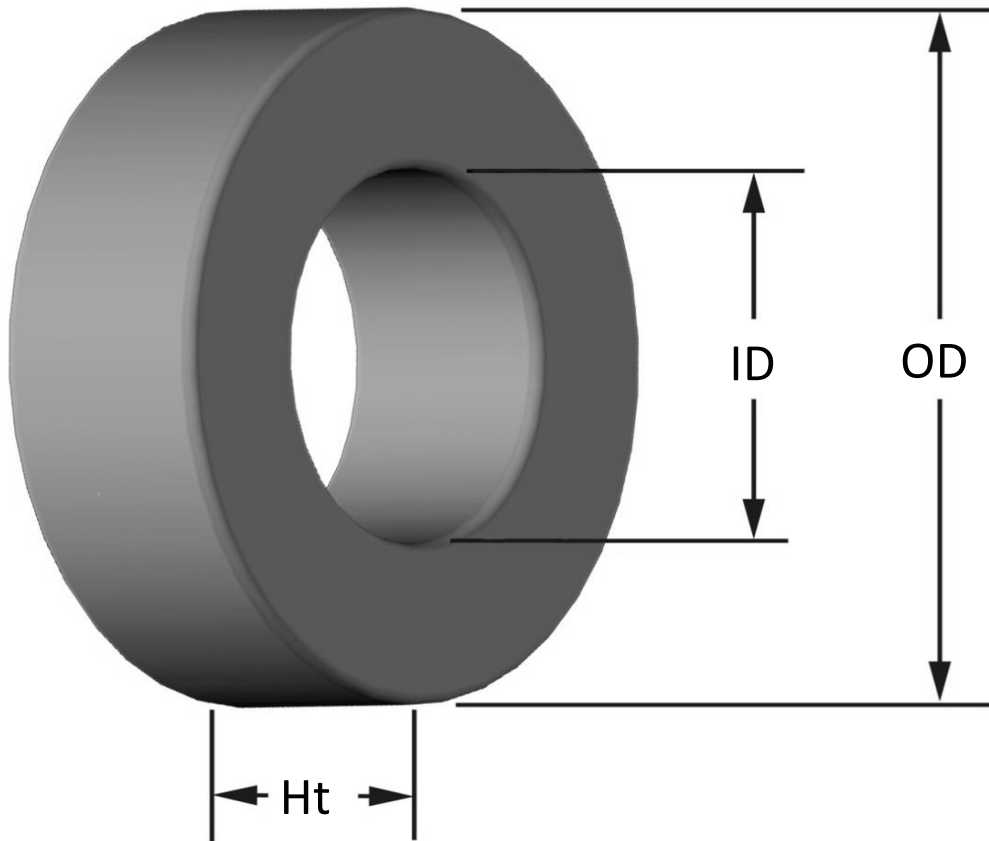


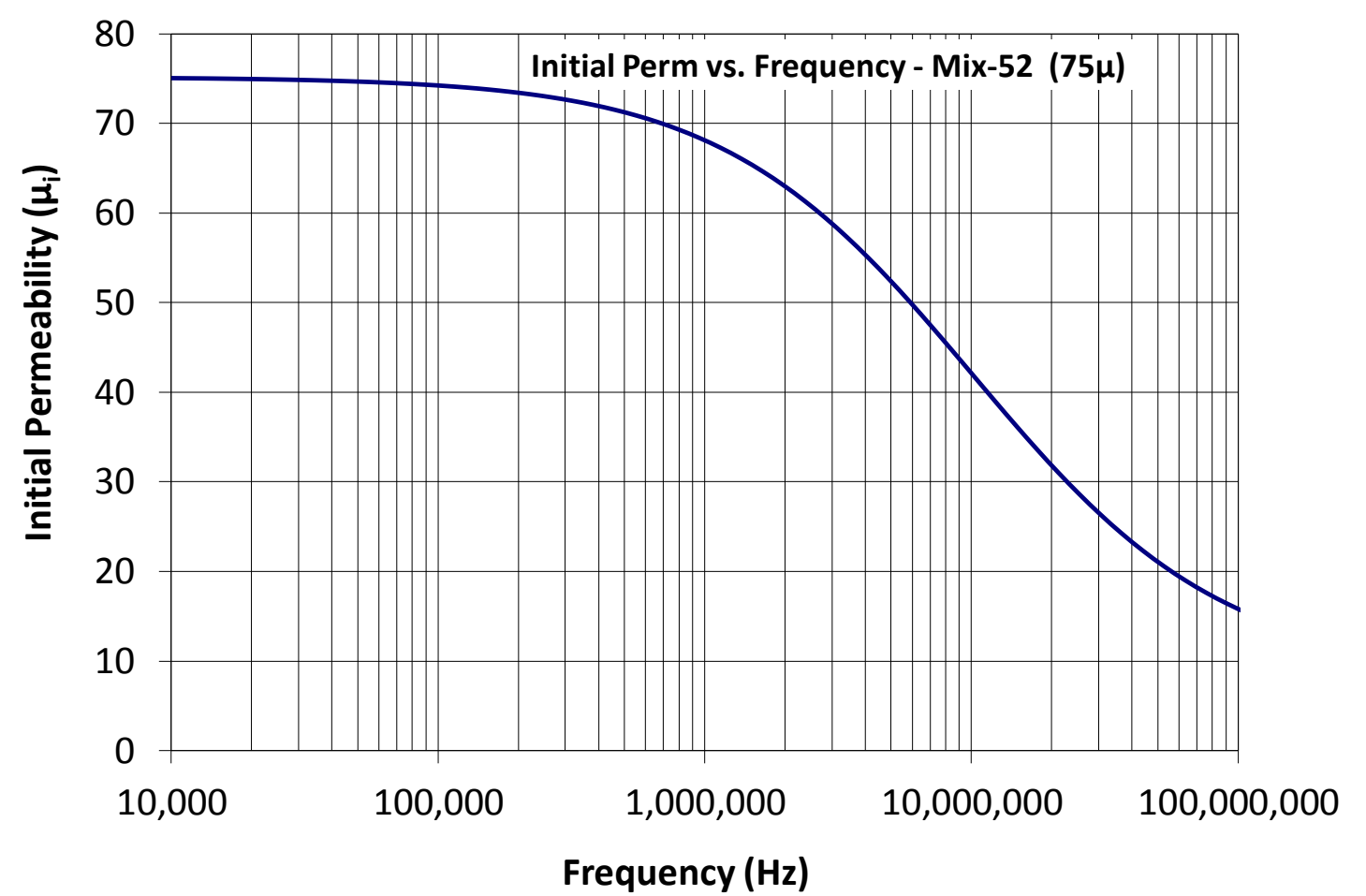
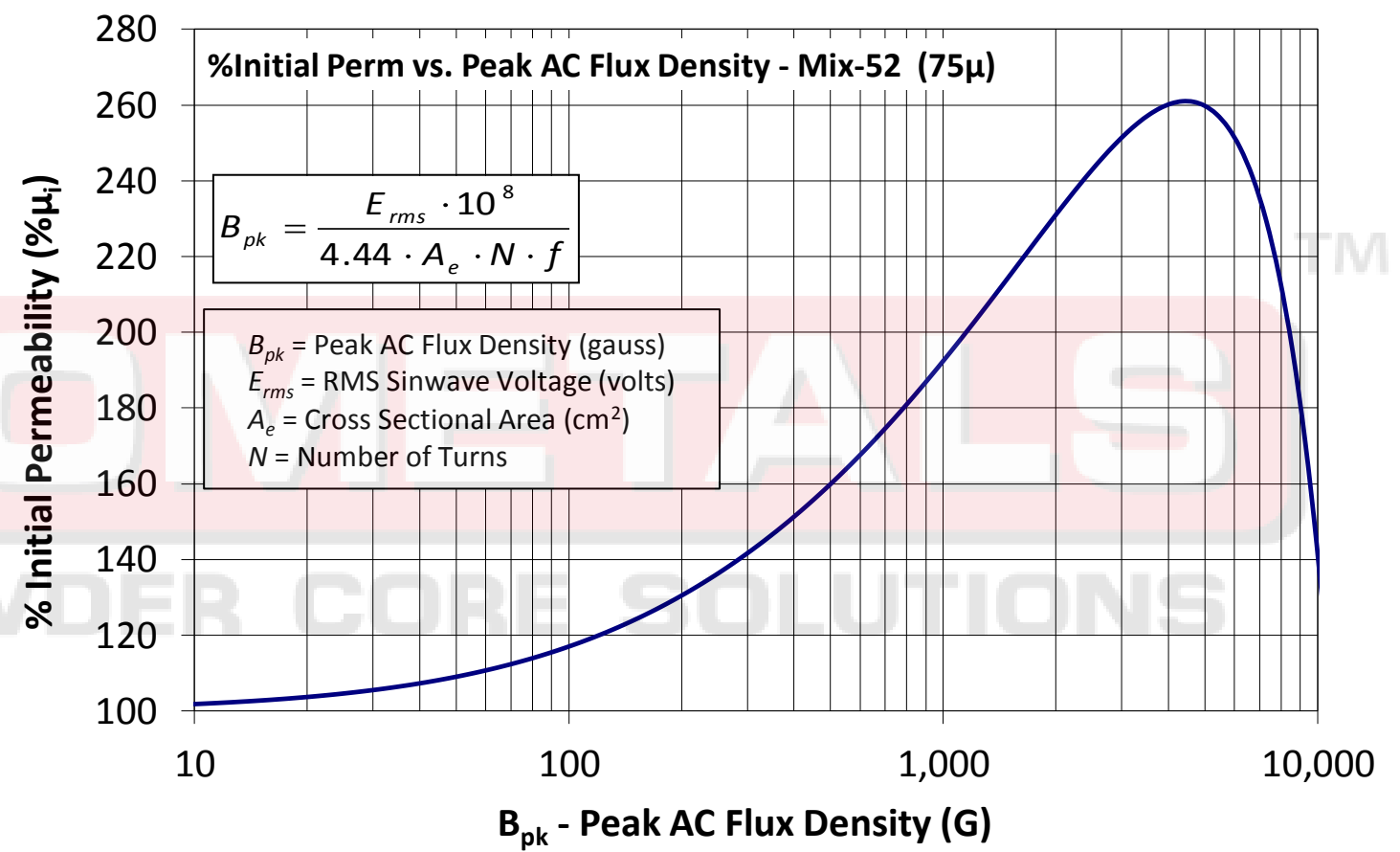
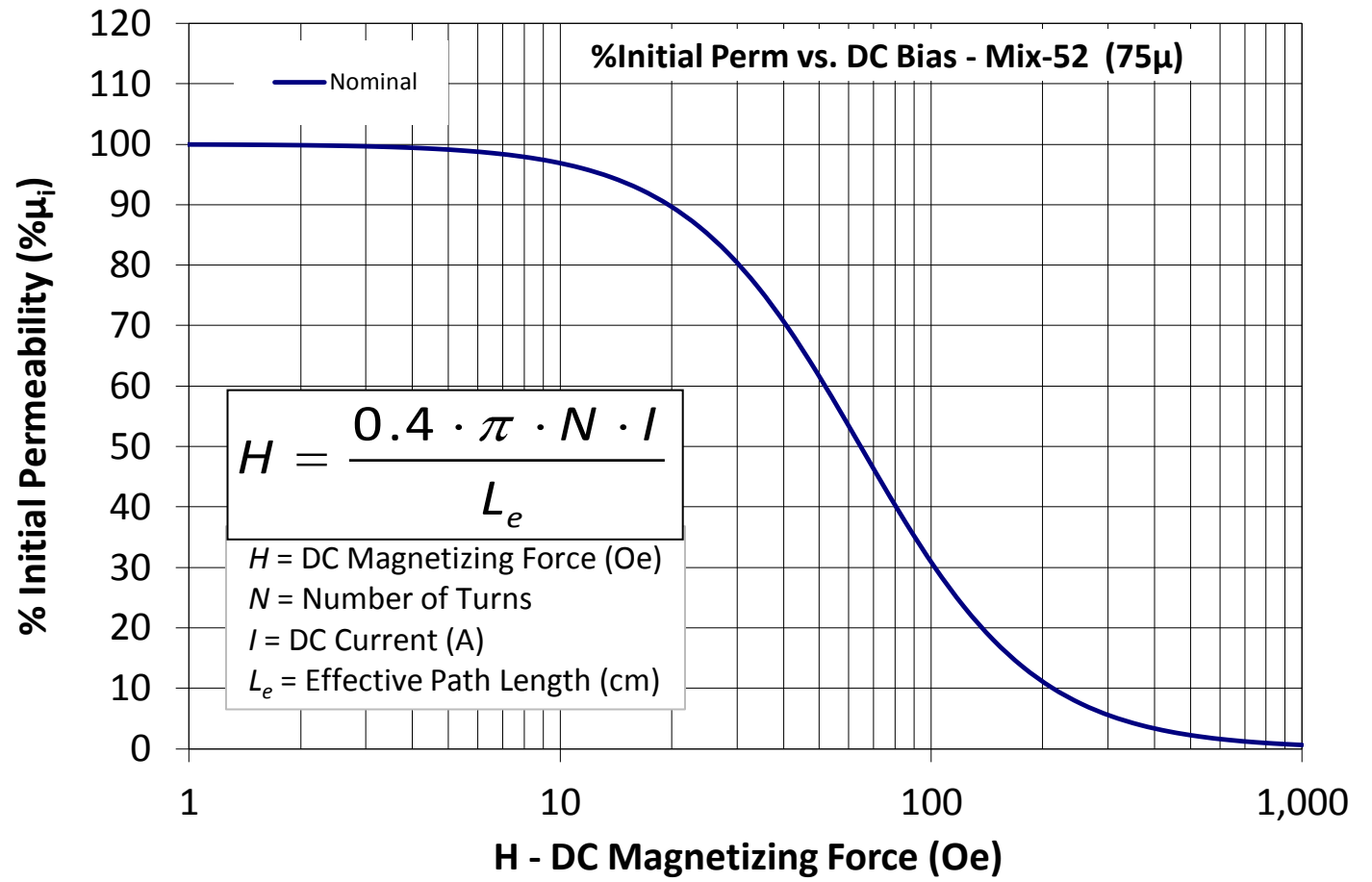
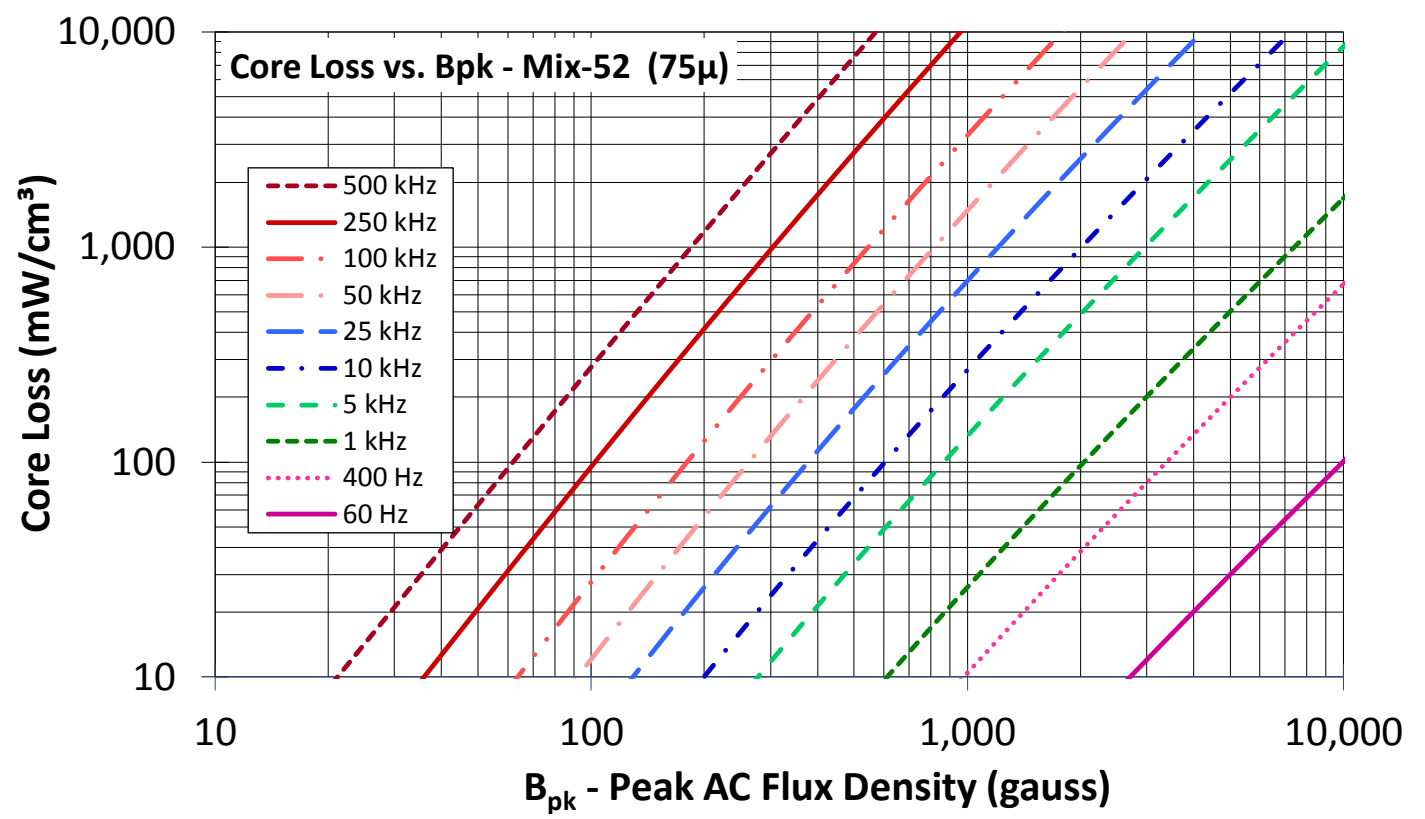


Part Number: **T300-52D**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	77.22 mm 77.98 mm	3.040 in 3.070 in
ID	(nom. - bare core) (min. - after coating)	49.02 mm 48.26 mm	1.930 in 1.900 in
Ht	(nom. - bare core) (max. - after coating)	25.40 mm 26.16 mm	1.000 in 1.030 in
Mass	(approximate)	470 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.38 cm ²	
	L _e - Eff. Mag. Path Length	19.8 cm	
	V _e - Eff. Core Volume	67.0 cm ³	
	WA - Min. Eff. Window Area	18.3 cm ²	
	sa - Surface Area	215 cm ²	
	mlt - mean length per turn	10.6 cm	
Inductance	μ _i (reference)	75	
	A _L value (nominal)	160 nH/N ²	
	Test Winding	N=100, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	1.5 V	
A _L tolerance	±10%		
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.00E+09, b=1.10E+08, c=2.10E+06, d=6.90E-14		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	58 mW/cm ³	
Core Loss (maximum)	67 mW/cm ³		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.00E-02, b=4.66E-06, c=1.84, d=0.00		
	H _{DC}	50 Oe	
	Percent Initial Perm(nom.)	61.6%	
Percent Initial Perm(min.)	53.4%		
Coating/Pkg	Coating Type:	Green/Blue Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	30 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	38	48	60	76	95	119	149	186	232	289	360
		Rdc(Ω)	8.3 m	16.7 m	33.1 m	66.7 m	132.7 m	264.3 m	526.3 m	1.0	2.1	4.1	8.1
Full Winding	Turns	96	148	229	355	549	850	1,316	2,037	3,153	4,880	7,553	
	Rdc(Ω)	21.0 m	51.4 m	126.4 m	311.7 m	766.7 m	1.9	4.6	11.4	28.2	69.3	170.7	