

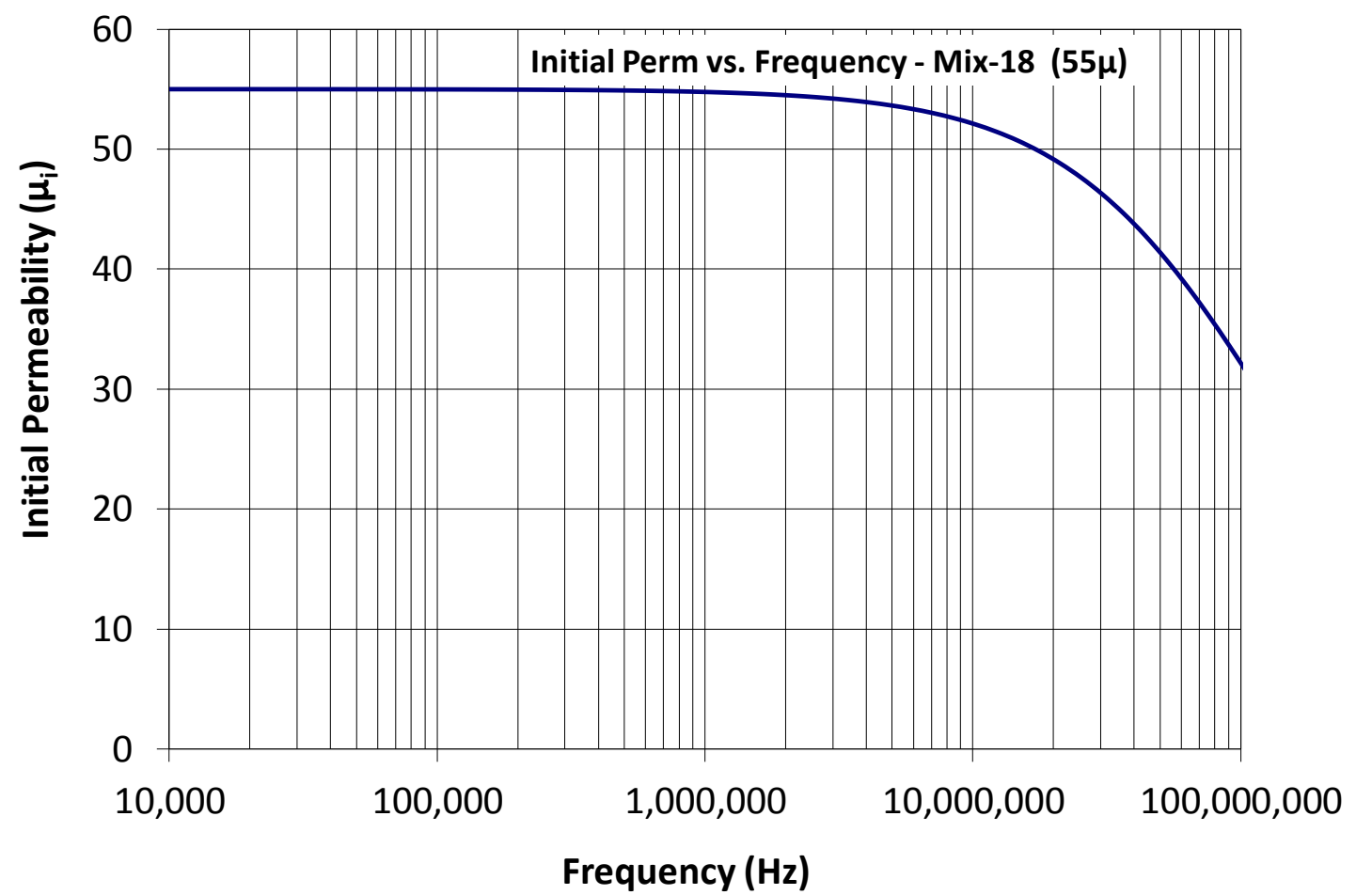
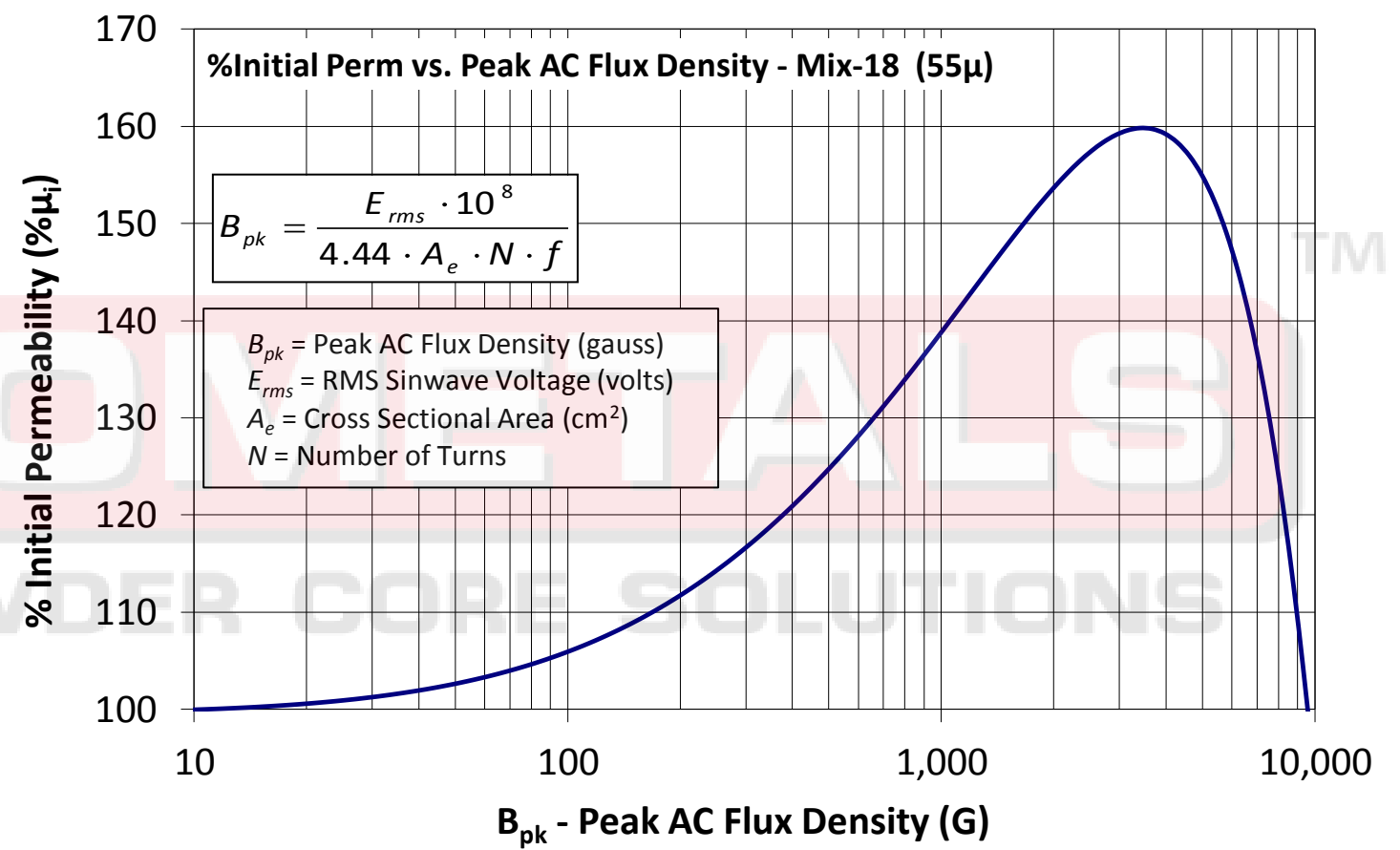
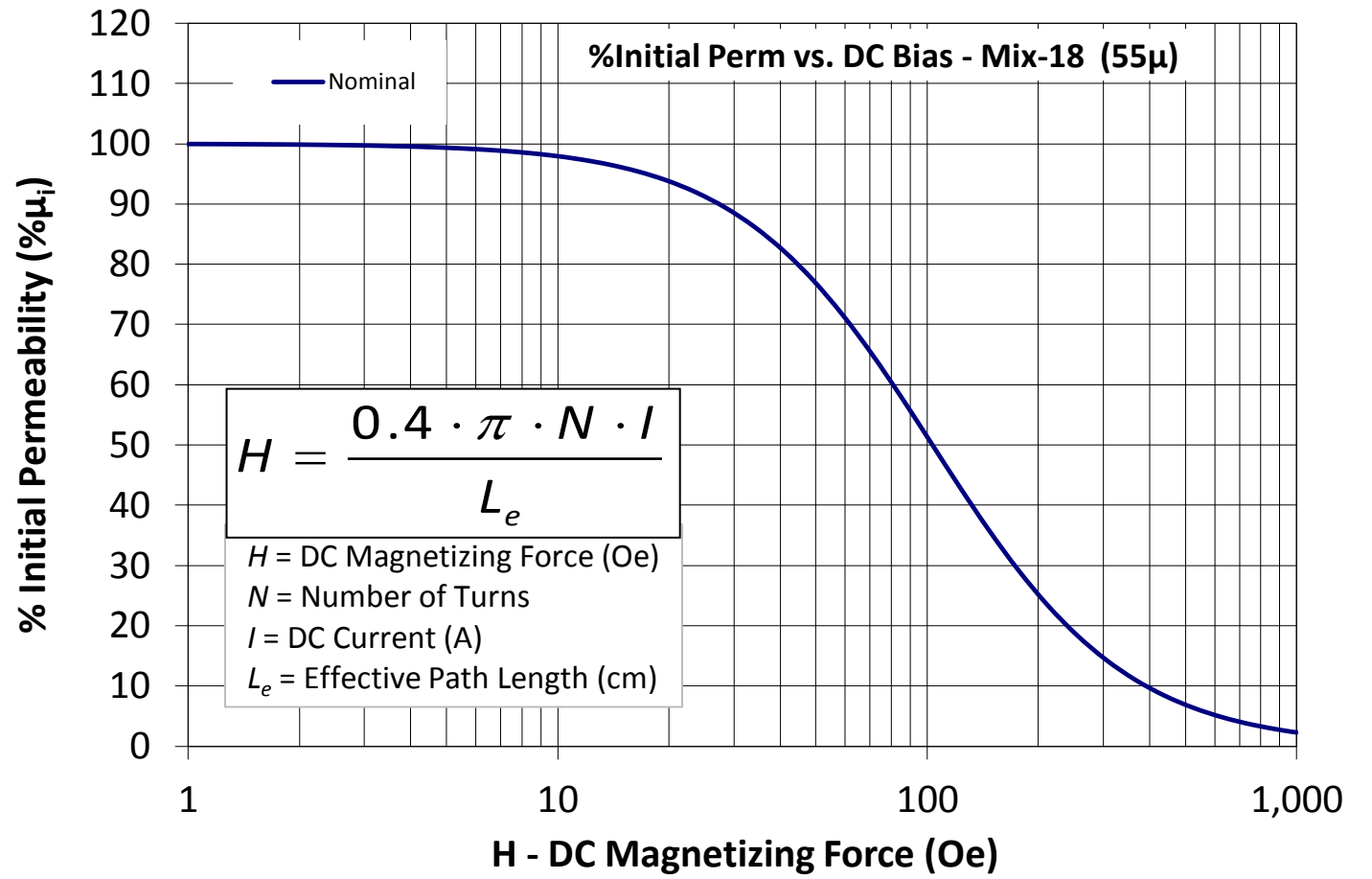
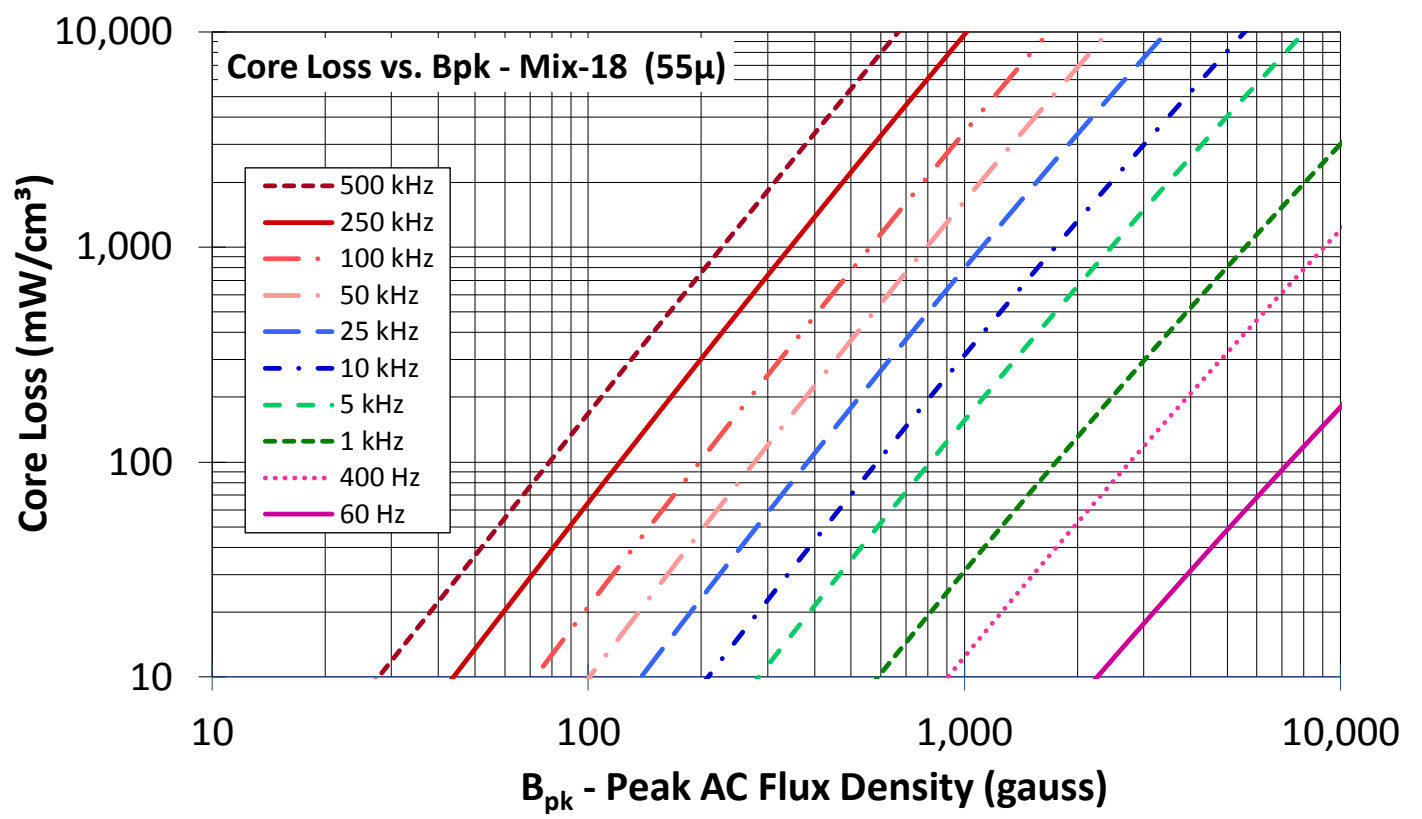


**Part Number:** **T300-18D**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	77.22 mm 77.98 mm	3.040 in 3.070 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	49.02 mm 48.26 mm	1.930 in 1.900 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	25.40 mm 26.16 mm	1.000 in 1.030 in
<b>Mass</b>	(approximate)	440 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	3.38 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	19.8 cm	
	V <sub>e</sub> - Eff. Core Volume	67.0 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	18.3 cm <sup>2</sup>	
	sa - Surface Area	215 cm <sup>2</sup>	
	mlt - mean length per turn	10.6 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	55	
	A <sub>L</sub> value (nominal)	116 nH/N <sup>2</sup>	
	Test Winding	N=100, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	1.5 V	
A <sub>L</sub> tolerance	±10%		
<b>Core Loss</b>	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and: a=8.00E+08, b=1.70E+08, c=9.00E+05, d=3.10E-14		
	B <sub>pk</sub>	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	46 mW/cm <sup>3</sup>	
Core Loss (maximum)	53 mW/cm <sup>3</sup>		
<b>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.00E-02, b=4.72E-06, c=1.65, d=0.00		
	H <sub>DC</sub>	100 Oe	
	Percent Initial Perm(nom.)	51.4%	
Percent Initial Perm(min.)	43.9%		
<b>Coating/Pkg</b>	Coating Type:	Green/Red Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	30 Pcs/Box	



<b>Winding Table</b>	<b>Wire Size</b>	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
	<b>Single Layer</b>	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
<b>Full Winding</b>	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	