

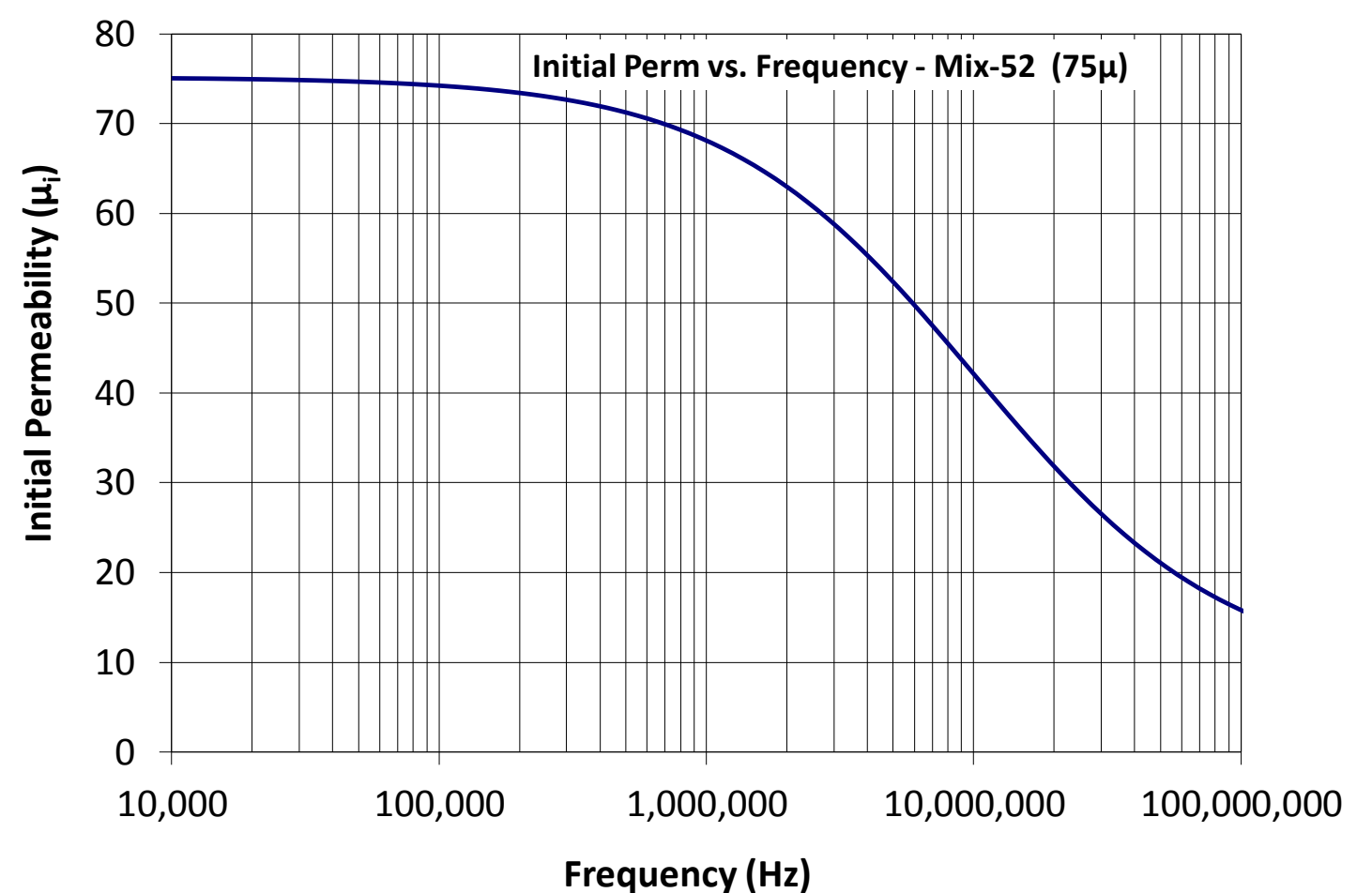
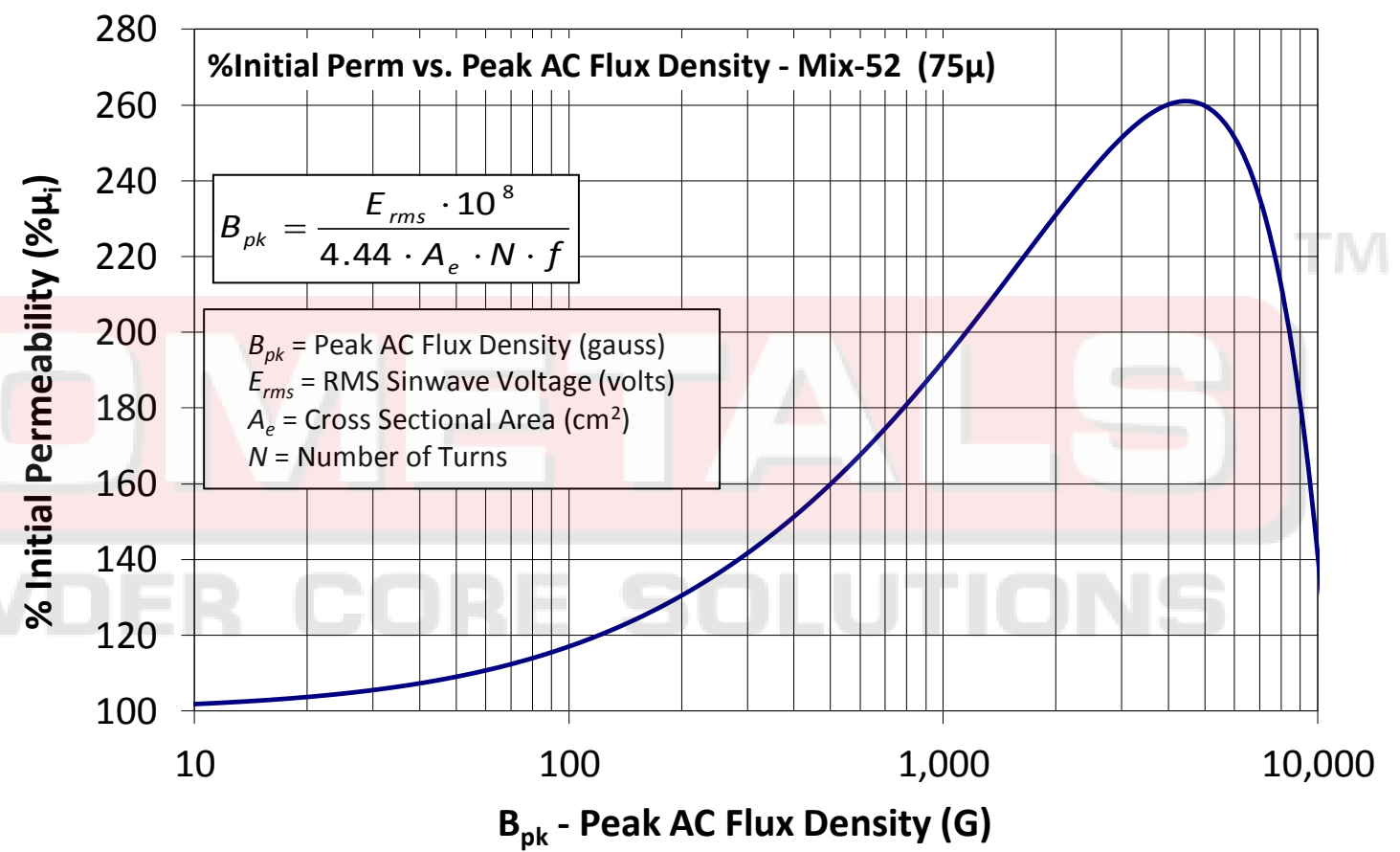
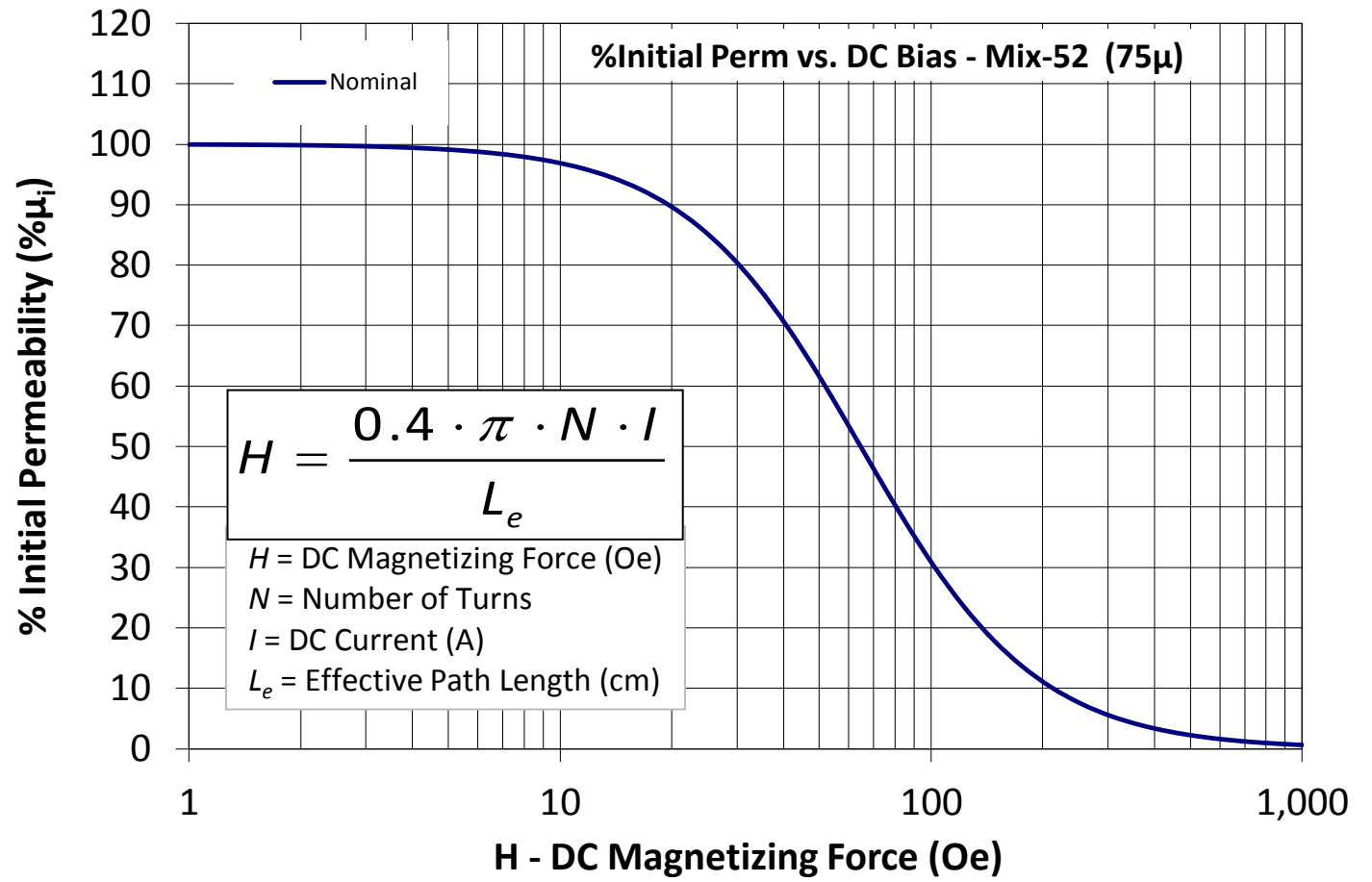
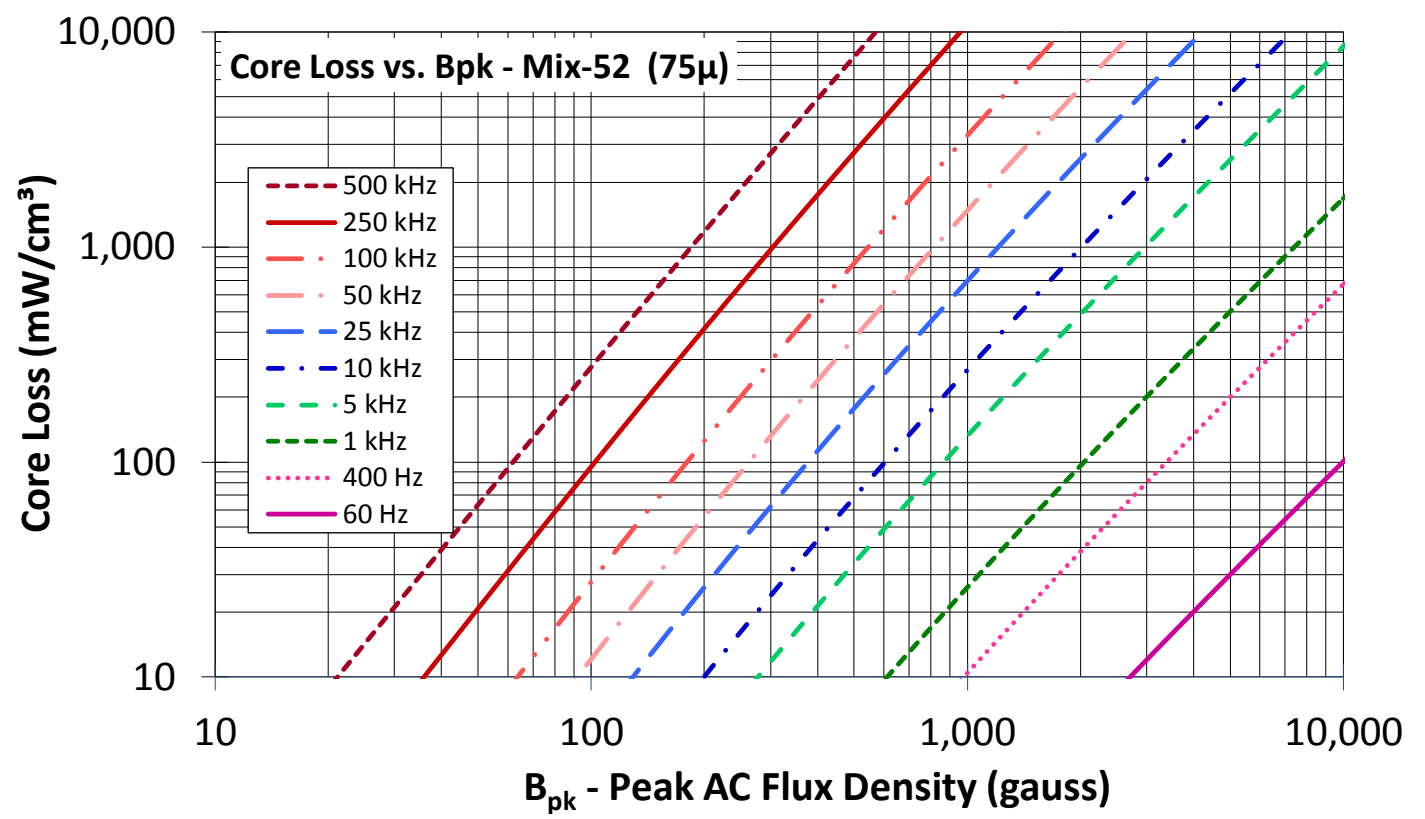


Part Number: T20-52E

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	5.08 mm 5.28 mm	0.200 in 0.208 in
ID	(nom. - bare core) (min. - after coating)	2.24 mm 2.03 mm	0.088 in 0.080 in
Ht	(nom. - bare core) (max. - after coating)	5.33 mm 5.54 mm	0.210 in 0.218 in
Mass	(approximate)	0.55 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0690 cm ²	
	L _e - Eff. Mag. Path Length	1.15 cm	
	V _e - Eff. Core Volume	0.0780 cm ³	
	WA - Min. Eff. Window Area	0.0324 cm ²	
	sa - Surface Area	1.59 cm ²	
	mlt - mean length per turn	1.53 cm	
Inductance	μ _i (reference)	75	
	A _L value (nominal)	52.4 nH/N ²	
	Test Winding	N=50, #36 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.015 V	
	A _L tolerance	±10%	
Core Loss	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.00E+09, b=1.10E+08, c=2.10E+06, d=6.90E-14		
	Bpk	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:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	30,000 Pcs/Box	



Winding Table	Wire Size	AWG	26	28	30	32	34	36	38	40	42	44	#N/A
		mm	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A
	Single Layer	Turns	9	12	16	21	27	34	43	54	68	85	#N/A
		Rdc(Ω)	18.5 m	39.2 m	83.1 m	173.4 m	354.7 m	710.3 m	1.4	2.9	5.7	11.4	#N/A
Full Winding	Turns	9	13	21	32	50	77	119	184	285	441	#N/A	
	Rdc(Ω)	18.5 m	42.5 m	109.1 m	264.3 m	656.8 m	1.6	4.0	9.7	24.0	58.9	#N/A	

Special Spec: No color code

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