



Part Number: **T30-8/90**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	7.80 mm 8.18 mm	0.307 in 0.322 in										
ID	(nom. - bare core) (min. - after coating)	3.84 mm 3.45 mm	0.151 in 0.136 in										
Ht	(nom. - bare core) (max. - after coating)	3.25 mm 3.76 mm	0.128 in 0.148 in										
Mass	(approximate)	0.72 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0600 cm ²											
	L _e - Eff. Mag. Path Length	1.84 cm											
	V _e - Eff. Core Volume	0.110 cm ³											
	WA - Min. Eff. Window Area	0.0937 cm ²											
	sa - Surface Area	2.49 cm ²											
Inductance	μ _i (reference)	35											
	A _L value (nominal)	14 nH/N ²											
	Test Winding	N=50, #34 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.013 V											
Core Loss	A _L tolerance	±10%											
	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=1.90E+09, b=2.00E+08, c=9.00E+05, d=5.00E-15											
	B _{pk}	140 G											
	frequency	100 kHz											
DC Saturation	Core Loss (nominal)	32 mW/cm ³											
	Core Loss (maximum)	36 mW/cm ³											
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$											
	where H expressed in oersteds, and:	a=1.00E-02, b=3.49E-06, c=1.43, d=0.00											
	H _{DC}	200 Oe											
Coating/Pkg	Percent Initial Perm(nom.)	60.1%											
	Percent Initial Perm(min.)	53.7%											
	Coating Type:	Yellow/Red Epoxy Paint											
	Voltage Breakdown (min.)	500 Vrms, 60Hz											
Winding Table	Limit	3 mA, 5 s											
	Package Quantity	25,000 Pcs/Box											
	Wire Size	AWG	22	24	26	28	30	32	34	36	38	40	42
		mm	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063
	Single Layer	Turns	11	14	18	23	30	37	47	59	75	94	117
Rdc(Ω)		8.1 m	16.5 m	33.7 m	68.4 m	141.9 m	278.3 m	562.2 m	1.1	2.3	4.5	9.0	
Full Winding	Turns	10	16	25	39	60	93	143	222	344	532	823	
	Rdc(Ω)	7.4 m	18.8 m	46.7 m	116.0 m	283.7 m	699.5 m	1.7	4.2	10.4	25.6	63.0	

