



Part Number: T12-2

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	3.18 mm 3.30 mm	0.125 in 0.130 in
ID	(nom. - bare core) (min. - after coating)	1.57 mm 1.45 mm	0.062 in 0.057 in
Ht	(nom. - bare core) (max. - after coating)	1.27 mm 1.40 mm	0.050 in 0.055 in
Mass	(approximate)	0.04 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0100 cm ²	
	L _e - Eff. Mag. Path Length	0.750 cm	
	V _e - Eff. Core Volume	0.00770	
	WA - Min. Eff. Window Area	0.0165 cm ²	
	sa - Surface Area	0.395 cm ²	
Inductance	μ _i (reference)	10	
	A _L value (nominal)	2 nH/N ²	
	Test Winding	N=25, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.11 V	
Core Loss & Q	A _L tolerance	±5%	
	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=4.00E+09, b=3.00E+08, c=2.70E+06, d=9.60E-16	
	Q test winding	N=25, #36 AWG	
	Q frequency	12 MHz	
DC Saturation	Q min on HP4342A	88	
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=1.83E-07, c=1.46, d=0.00	
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	95.9%	
Coating/Pkg	Percent Initial Perm(min.)	94.8%	
	Coating Type:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
Winding Table	Package Quantity	250,000 Pcs/Box	
	Wire Size	AWG	30 32 34 36 38 40 42 44 #N/A #N/A #N/A
Single Layer	mm	0.250 0.200 0.160 0.125 0.100 0.080 0.063 0.050 #N/A #N/A #N/A	
	Turns	11 14 18 23 30 38 47 60 #N/A #N/A #N/A	
Full Winding	Rdc(Ω)	20.0 m 40.5 m 82.8 m 168.3 m 349.0 m 703.1 m 1.4 2.8 #N/A #N/A #N/A	
	Turns	11 16 25 39 60 93 145 224 #N/A #N/A #N/A	
Full Winding	Rdc(Ω)	20.0 m 46.3 m 115.0 m 285.3 m 698.0 m 1.7 4.3 10.5 #N/A #N/A #N/A	

