



Part Number: T27-2

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OD	(nom. - bare core) (max. - after coating)	7.11 mm 7.49 mm	0.280 in 0.295 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)	0.40 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0470 cm ²	
	L _e - Eff. Mag. Path Length	1.71 cm	
	V _e - Eff. Core Volume	0.0800 cm ³	
	WA - Min. Eff. Window Area	0.0937 cm ²	
	sa - Surface Area	2.21 cm ²	
Inductance	μ _i (reference)	10	
	A _L value (nominal)	3.3 nH/N ²	
	Test Winding	N=50, #34 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	1.0 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=50, #34 AWG	
	Q frequency	5.5 MHz	
DC Saturation	Q min on HP4342A	118	
	%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:	Red/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
Winding Table	Package Quantity	30,000 Pcs/Box	
	Wire Size	AWG	22 24 26 28 30 32 34 36 38 40 42
Single Layer	mm	0.630 0.500 0.400 0.315 0.250 0.200 0.160 0.125 0.100 0.080 0.063	
	Turns	11 14 18 23 30 37 47 59 75 94 117	
Full Winding	Rdc(Ω)	7.7 m 15.7 m 32.0 m 65.0 m 134.9 m 264.6 m 534.6 m 1.1 2.2 4.3 8.5	
	Turns	10 16 25 39 60 93 143 222 344 532 823	
Full Winding	Rdc(Ω)	7.0 m 17.9 m 44.4 m 110.3 m 269.8 m 665.1 m 1.6 4.0 9.9 24.3 59.9	

