



**Part Number: MP-026173-8**  
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<b>OD</b>	(nom. - bare core)	6.60 mm	0.260 in
	(max. - after coating)	7.32 mm	0.288 in
<b>ID</b>	(nom. - bare core)	2.67 mm	0.105 in
	(min. - after coating)	2.21 mm	0.087 in
<b>Ht</b>	(nom. - bare core)	4.78 mm	0.188 in
	(max. - after coating)	5.54 mm	0.218 in
<b>Mass</b>	(approximate)	0.99 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0920 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	1.36 cm	
	V <sub>e</sub> - Eff. Core Volume	0.125 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	0.0384 cm <sup>2</sup>	
	sa - Surface Area	2.44 cm <sup>2</sup>	
	mlt - mean length per turn	1.73 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	173	
	A <sub>L</sub> value (nominal)	144 nH/N <sup>2</sup>	
	Test Winding	N=35, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.014 V	
	AL tolerance	±8%	
<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=3.167E+10, b=1.206E+09, c=9.656E+06, d=5.636E-14		
	B <sub>pk</sub>	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	312 mW/cm <sup>3</sup>	
Core Loss (maximum)	359 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=1.000E-02, b=1.313E-05, c=1.935, d=0.000		
	H <sub>DC</sub>	30 Oe	
	Percent Initial Perm.(nom.)	51.4%	
Percent Initial Perm.(min.)	42.6%		
<b>Coating/Pkg</b>	Coating Type:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	14,400 Pcs/Box	

<b>Winding Table</b>	<b>Wire Size</b>	AWG	26	28	30	32	34	36	38	40	42	44	-
		mm	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-
	<b>Single Layer</b>	Turns	11	14	18	23	29	37	47	59	74	93	-
		Rdc(Ω)	25.5 m	51.5 m	105.4 m	214.2 m	429.4 m	871.4 m	1.8	3.5	7.0	14.0	-
<b>Full Winding</b>	Turns	10	16	25	38	59	91	141	218	337	522	-	
	Rdc(Ω)	23.1 m	58.9 m	146.4 m	353.8 m	873.7 m	2.1	5.3	13.0	31.9	78.6	-	

