



**Part Number: MP-027205-8**  
Revision 20160816 - Generated 2016-Aug-16



<b>OD</b>	(nom. - bare core) (max. - after coating)	6.60 mm 7.24 mm	0.260 in 0.285 in										
<b>ID</b>	(nom. - bare core) (min. - after coating)	2.67 mm 2.29 mm	0.105 in 0.090 in										
<b>Ht</b>	(nom. - bare core) (max. - after coating)	2.54 mm 3.18 mm	0.100 in 0.125 in										
<b>Mass</b>	(approximate)	0.51 grams											
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0467 cm <sup>2</sup>											
	L <sub>e</sub> - Eff. Mag. Path Length	1.36 cm											
	V <sub>e</sub> - Eff. Core Volume	0.0640 cm <sup>3</sup>											
	WA - Min. Eff. Window Area	0.0410 cm <sup>2</sup>											
	sa - Surface Area	1.83 cm <sup>2</sup>											
	mlt - mean length per turn	1.25 cm											
<b>Inductance</b>	μ <sub>i</sub> (reference)	205											
	A <sub>L</sub> value (nominal)	89 nH/N <sup>2</sup>											
	Test Winding	N=35, #32 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.007 V											
<b>Core Loss</b>	AL tolerance	±8%											
	Core Loss(mW/cm <sup>3</sup> )=	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$											
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and:	a=1.143E+10, b=2.045E+09, c=1.156E+07, d=8.981E-14											
	B <sub>pk</sub>	1000 G											
	frequency	50 kHz											
<b>DC Saturation</b>	Core Loss (nominal)	350 mW/cm <sup>3</sup>											
	Core Loss (maximum)	402 mW/cm <sup>3</sup>											
	%μ <sub>i</sub> =	$\frac{1}{a + b \cdot H^c} + d$											
	where H expressed in oersteds, and:	a=1.000E-02, b=3.822E-06, c=2.349, d=0.000											
<b>Coating/Pkg</b>	H <sub>DC</sub>	30 Oe											
	Percent Initial Perm.(nom.)	47.0%											
	Percent Initial Perm.(min.)	36.6%											
<b>Winding Table</b>	Coating Type:	Parylene N											
	Voltage Breakdown (min.)	500 Vrms											
	Limit	0.1 mA, 5 s											
	Package Quantity	21,600 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	19	24	30	38	49	61	77	96	-
		Rdc(Ω)	18.3 m	37.1 m	80.1 m	160.9 m	319.9 m	644.5 m	1.3	2.6	5.3	10.4	-
<b>Full Winding</b>	Turns	11	17	26	41	63	98	151	234	362	560	-	
	Rdc(Ω)	18.3 m	45.1 m	109.6 m	274.9 m	671.8 m	1.7	4.1	10.0	24.7	60.8	-	

