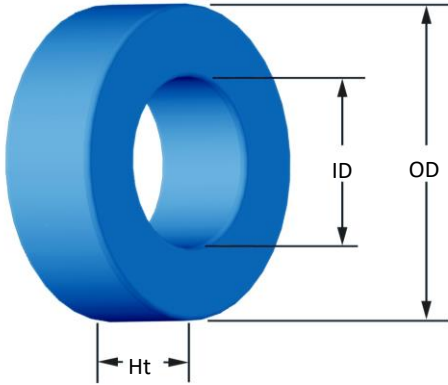




Part Number:

**MP-350173-2**

Revision 20170623 - Generated 2017-Jun-23



<b>OD</b>	(nom. - bare core) (max. - after coating)	88.85 mm 90.00 mm	3.498 in 3.543 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	66.01 mm 64.74 mm	2.599 in 2.549 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	15.93 mm 17.20 mm	0.627 in 0.677 in
<b>Mass</b>	(approximate)	350 grams	
<b>Magnetic Dimensions</b>	$A_e$ - Eff. Mag. Cross Section $L_e$ - Eff. Mag. Path Length $V_e$ - Eff. Core Volume WA - Min. Eff. Window Area sa - Surface Area mlt - mean length per turn	1.83 cm <sup>2</sup> 24 cm 43.9 cm <sup>3</sup> 32.9 cm <sup>2</sup> 251 cm <sup>2</sup> 9.20 cm	
<b>Inductance</b>	$\mu_i$ (reference) $A_L$ value (nominal) Test Winding Frequency Voltage on Agilent 4284A AL tolerance	173 166 nH/N <sup>2</sup> N=100, #18 AWG 10 kHz 0.81 V ±8%	
<b>Core Loss</b>	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 $B_{pk}$ expressed in gauss, $f$ expressed in hertz, and: $a=3.167E+10$ , $b=1.206E+09$ , $c=9.656E+06$ , $d=5.636E-14$ $B_{pk}$ frequency Core Loss (nominal) Core Loss (maximum)	1000 G 50 kHz 312 mW/cm <sup>3</sup> 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: $a=1.000E-02$ , $b=1.313E-05$ , $c=1.935$ , $d=0.000$ $H_{DC}$ Percent Initial Perm.(nom.) Percent Initial Perm.(min.)	30 Oe 51.4% 42.6%	
<b>Coating/Pkg</b>	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Blue Epoxy 1000 Vrms 0.1 mA, 5 s 45 Pcs/Box	
<b>Winding Table</b>	<b>Wire Size</b>	AWG	8      10      12      14      16      18      20      22      24      26      28
		mm	3.150   2.500   2.000   1.600   1.250   1.000   0.800   0.630   0.500   0.400   0.315
	<b>Single Layer</b>	Turns	52      65      82      103      129      161      201      250      312      389      485
		Rdc(Ω)	9.8 m   19.6 m   39.2 m   78.4 m   156.2 m   310.0 m   615.5 m   1.2      2.4      4.8      9.5
<b>Full Winding</b>	Turns	172      267      413      639      989      1,530      2,369      3,666      5,674      8,782      13,592	
	Rdc(Ω)	32.5 m   80.4 m   197.7 m   486.4 m   1.2      2.9      7.3      17.9      43.9      108.2      266.3	

