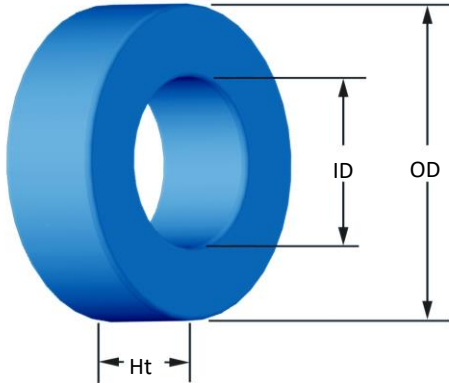




Part Number:

**SH-039060-8**

Revision 20170403 - Generated 2017-Apr-03



<b>OD</b>	(nom. - bare core) (max. - after coating)	9.65 mm 10.29 mm	0.380 in 0.405 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	4.78 mm 4.27 mm	0.188 in 0.168 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	3.18 mm 3.81 mm	0.125 in 0.150 in
<b>Mass</b>	(approximate)	0.92 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	0.0752 cm <sup>2</sup> 2.18 cm 0.164 cm <sup>3</sup> 0.143 cm <sup>2</sup> 3.61 cm <sup>2</sup> 1.58 cm	
<b>Inductance</b>	$\mu_i$ (reference) $A_L$ value (nominal) Test Winding Frequency Voltage on Agilent 4284A AL tolerance	60 25 nH/N <sup>2</sup> N=45, #30 AWG 10 kHz 0.015 V $\pm 12\%$	
<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: $a=1.000E+06$ , $b=8.801E+08$ , $c=5.421E+06$ , $d=1.033E-14$ $B_{pk}$ frequency Core Loss (nominal) Core Loss (maximum)	1000 G 50 kHz 317 mW/cm <sup>3</sup> 365 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: $a=1.000E-02$ , $b=7.724E-06$ , $c=1.612$ , $d=0.000$ $H_{oc}$ Percent Initial Perm.(nom.) Percent Initial Perm.(min.)	100 Oe 43.6% 36.5%	
<b>Coating/Pkg</b>	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Parylene N 500 Vrms 0.1 mA, 5 s 10,800 Pcs/Box	
<b>Winding Table</b>	<b>Wire Size</b>	AWG	20    22    24    26    28    30    32    34    36    38    40
		mm	0.800    0.630    0.500    0.400    0.315    0.250    0.200    0.160    0.125    0.100    0.080
	<b>Single Layer</b>	Turns	11    14    18    23    29    37    47    59    74    93    116
		Rdc(Ω)	5.8 m    11.7 m    23.9 m    48.6 m    97.4 m    197.6 m    399.2 m    796.9 m    1.6    3.2    6.3
<b>Full Winding</b>	Turns	10    16    25    38    59    92    142    219    339    525    813	
	Rdc(Ω)	5.2 m    13.4 m    33.2 m    80.2 m    198.1 m    491.3 m    1.2    3.0    7.3    17.9    44.2	

