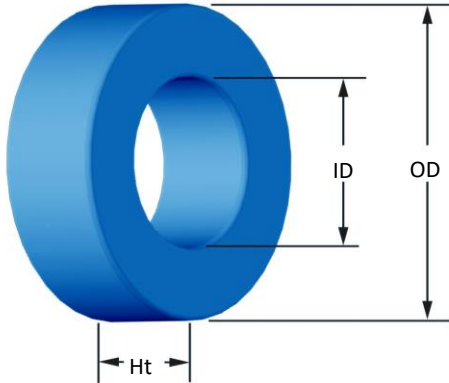




Part Number:

**SH-108125-2**

Revision 20170403 - Generated 2017-Apr-03



<b>OD</b>	(nom. - bare core) (max. - after coating)	26.92 mm 27.81 mm	1.060 in 1.095 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	14.73 mm 14.10 mm	0.580 in 0.555 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	14.00 mm 15.00 mm	0.551 in 0.591 in
<b>Mass</b>	(approximate)	30 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	0.819 cm <sup>2</sup> 6.35 cm 5.20 cm <sup>3</sup> 1.56 cm <sup>2</sup> 31.9 cm <sup>2</sup> 5.08 cm	
<b>Inductance</b>	$\mu_i$ (reference) $A_L$ value (nominal) Test Winding Frequency Voltage on Agilent 4284A AL tolerance	125 195.8 nH/N <sup>2</sup> N=80, #26 AWG 10 kHz 0.29 V ±8%	
<b>Core Loss</b>	Core Loss (mW/cm <sup>3</sup> ) = $\frac{f}{a + b + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ where $B_{pk}$ expressed in gauss, $f$ expressed in hertz, and: $a=7.985E+09$ , $b=1.378E+09$ , $c=4.041E+06$ , $d=7.891E-15$ $B_{pk}$ frequency Core Loss (nominal) Core Loss (maximum)	1000 G 50 kHz 240 mW/cm <sup>3</sup> 276 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: $a=1.000E-02$ , $b=3.265E-05$ , $c=1.587$ , $d=0.000$ $H_{DC}$ Percent Initial Perm.(nom.) Percent Initial Perm.(min.)	40 Oe 46.8% 39.7%	
<b>Coating/Pkg</b>	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Blue Epoxy 1000 Vrms 0.1 mA, 5 s 500 Pcs/Box	
<b>Winding Table</b>	<b>Wire Size</b>	AWG	10    12    14    16    18    20    22    24    26    28    30
		mm	2.500    2.000    1.600    1.250    1.000    0.800    0.630    0.500    0.400    0.315    0.250
	<b>Single Layer</b>	Turns	12    16    20    26    33    41    52    66    82    103    129
		Rdc(Ω)	2.0 m    4.2 m    8.4 m    17.4 m    35.0 m    69.2 m    139.7 m    281.9 m    557.1 m    1.1    2.2
<b>Full Winding</b>	Turns	13    20    30    47    73    112    174    269    417    645    998	
	Rdc(Ω)	2.2 m    5.3 m    12.6 m    31.4 m    77.5 m    189.2 m    467.3 m    1.1    2.8    7.0    17.1	

