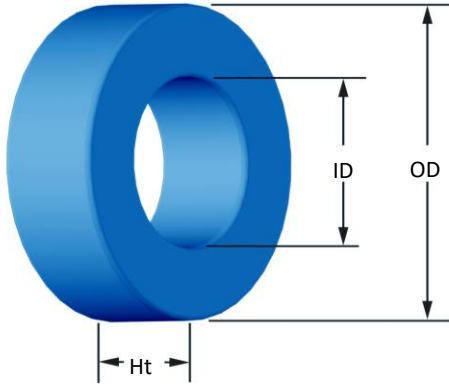




Part Number:

SH-040125-2

Revision 20170403 - Generated 2017-Apr-03



OD	(nom. - bare core) (max. - after coating)	10.16 mm 10.80 mm	0.400 in 0.425 in
ID	(nom. - bare core) (min. - after coating)	5.08 mm 4.57 mm	0.200 in 0.180 in
Ht	(nom. - bare core) (max. - after coating)	3.96 mm 4.57 mm	0.156 in 0.180 in
Mass	(approximate)	1.4 grams	
Magnetic Dimensions	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	0.100 cm ² 2.38 cm 0.238 cm ³ 0.164 cm ² 4.20 cm ² 1.77 cm	
Inductance	μ_i (reference) A_L value (nominal) Test Winding Frequency Voltage on Agilent 4284A AL tolerance	125 66 nH/N ² N=55, #30 AWG 10 kHz 0.024 V $\pm 12\%$	
Core Loss	Core Loss (mW/cm ³) = $\frac{f}{a + \frac{b}{B_{pk}^3} + \frac{c}{B_{pk}^{2.3}} + \frac{d}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ 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 ³ 276 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ 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%	
Coating/Pkg	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Blue Epoxy 1000 Vrms 0.1 mA, 5 s 9,000 Pcs/Box	
Winding Table	Wire Size	AWG	20 22 24 26 28 30 32 34 36 38 40
		mm	0.80 0.630 0.500 0.400 0.315 0.250 0.200 0.160 0.125 0.100 0.080
	Single Layer	Turns	12 15 19 25 32 40 50 63 80 100 125
		Rdc(Ω)	7.0 m 14.0 m 28.2 m 59.1 m 120.3 m 239.1 m 475.2 m 952.3 m 1.9 3.8 7.6
Full Winding	Turns	12 18 28 44 68 105 162 251 389 602 931	
	Rdc(Ω)	7.0 m 16.8 m 41.6 m 104.0 m 255.5 m 627.5 m 1.5 3.8 9.4 23.0 56.6	

