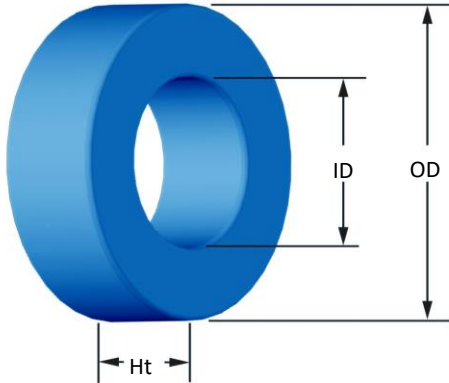




Part Number:

SH-028125-8

Revision 20170403 - Generated 2017-Apr-03



OD	(nom. - bare core) (max. - after coating)	7.04 mm 7.67 mm	0.277 in 0.302 in
ID	(nom. - bare core) (min. - after coating)	3.96 mm 3.45 mm	0.156 in 0.136 in
Ht	(nom. - bare core) (max. - after coating)	5.08 mm 5.72 mm	0.200 in 0.225 in
Mass	(approximate)	0.72 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	0.0750 cm ² 1.68 cm 0.126 cm ³ 0.0935 cm ² 2.80 cm ² 1.74 cm	
Inductance	μ_i (reference) A_L value (nominal) Test Winding Frequency Voltage on Agilent 4284A AL tolerance	125 70 nH/N ² N=40, #32 AWG 10 kHz 0.013 V $\pm 12\%$	
Core Loss	Core Loss (mW/cm ³) = $\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ where B_{pk} expressed in gauss, f expressed in hertz, and: $a=7.985E+09$, $b=1.378E+09$, $c=4.041E+06$, $d=7.891E-15$ 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	Parylene N 500 Vrms 0.1 mA, 5 s 12,600 Pcs/Box	
Winding Table	Wire Size	AWG	22 24 26 28 30 32 34 36 38 40 42
		mm	0.630 0.500 0.400 0.315 0.250 0.200 0.160 0.125 0.100 0.080 0.063
	Single Layer	Turns	11 14 18 23 29 37 47 59 75 93 117
		Rdc(Ω)	10.1 m 20.5 m 41.9 m 85.1 m 170.7 m 346.3 m 699.6 m 1.4 2.8 5.6 11.1
Full Winding	Turns	10 16 25 39 60 92 143 222 343 531 821	
	Rdc(Ω)	9.2 m 23.4 m 58.2 m 144.3 m 353.1 m 861.1 m 2.1 5.3 12.9 31.8 78.2	

