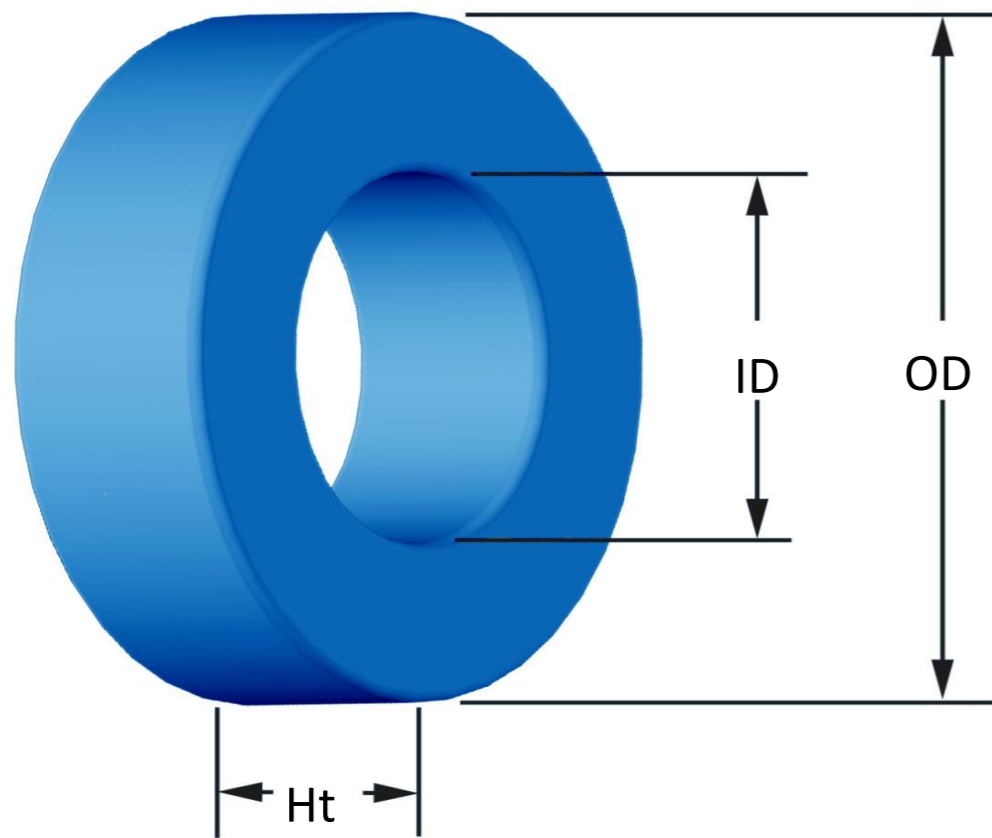




Part Number: **HF-109147-2**
 Revision 20160816 - Generated 2016-Aug-16



| | | | |
|-----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 26.92 mm 27.81 mm | 1.060 in 1.095 in |
| ID | (nom. - bare core) (min. - after coating) | 14.73 mm 14.10 mm | 0.580 in 0.555 in |
| Ht | (nom. - bare core) (max. - after coating) | 18.00 mm 19.00 mm | 0.709 in 0.748 in |
| Mass | (approximate) | 50 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 1.01 cm ² | |
| | L _e - Eff. Mag. Path Length | 6.35 cm | |
| | V _e - Eff. Core Volume | 6.43 cm ³ | |
| | WA - Min. Eff. Window Area | 1.56 cm ² | |
| | sa - Surface Area | 35.8 cm ² | |
| | mlt - mean length per turn | 5.88 cm | |
| Inductance | μ _i (reference) | 147 | |
| | A _L value (nominal) | 294 nH/N ² | |
| | Test Winding | N=80, #26 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.36 V | |
| | AL tolerance | ±8% | |
| Core Loss | $\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ | | |
| | where B _{pk} expressed in gauss, f expressed in hertz, and: a=4.299E+10, b=6.671E+08, c=3.114E+06, d=8.003E-14 | | |
| | B _{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 509 mW/cm ³ | |
| Core Loss (maximum) | 585 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=1.248E-06, c=2.169, d=0.000 | | |
| | H _{DC} | 40 Oe | |
| | Percent Initial Perm.(nom.) | 72.9% | |
| Percent Initial Perm.(min.) | 64.4% | | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 300 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|-------|--------|--------|--------|---------|---------|---------|---------|---------|-------|-------|
| Winding Table | Wire Size | 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 |
| | Single Layer | Turns | 12 | 16 | 20 | 26 | 33 | 41 | 52 | 66 | 82 | 103 | 129 |
| | | Rdc(Ω) | 2.3 m | 4.9 m | 9.7 m | 20.1 m | 40.6 m | 80.2 m | 161.7 m | 326.4 m | 644.9 m | 1.3 | 2.6 |
| Full Winding | Turns | 13 | 20 | 30 | 47 | 73 | 112 | 174 | 269 | 417 | 645 | 998 | |
| | Rdc(Ω) | 2.5 m | 6.1 m | 14.6 m | 36.3 m | 89.7 m | 219.0 m | 541.0 m | 1.3 | 3.3 | 8.1 | 19.9 | |

