



Part Number: **HF-027014-8**
Revision 20160816 - Generated 2016-Aug-16



| | | | |
|-----------------------------|--|------------------------|----------|
| OD | (nom. - bare core) | 6.60 mm | 0.260 in |
| | (max. - after coating) | 7.24 mm | 0.285 in |
| ID | (nom. - bare core) | 2.67 mm | 0.105 in |
| | (min. - after coating) | 2.29 mm | 0.090 in |
| Ht | (nom. - bare core) | 2.54 mm | 0.100 in |
| | (max. - after coating) | 3.18 mm | 0.125 in |
| Mass | (approximate) | 0.40 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.0467 cm ² | |
| | L _e - Eff. Mag. Path Length | 1.36 cm | |
| | V _e - Eff. Core Volume | 0.0640 cm ³ | |
| | WA - Min. Eff. Window Area | 0.0410 cm ² | |
| | sa - Surface Area | 1.83 cm ² | |
| | mlt - mean length per turn | 1.25 cm | |
| Inductance | μ _i (reference) | 14 | |
| | A _L value (nominal) | 6.05 nH/N ² | |
| | Test Winding | N=35, #32 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.007 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=2.058E+09, b=3.239E+08, c=3.003E+06, d=1.233E-13 | | |
| | B _{pk} | 300 G | |
| | frequency | 100 kHz | |
| | Core Loss (nominal) | 214 mW/cm ³ | |
| Core Loss (maximum) | 246 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=8.808E-07, c=1.438, d=0.000 | | |
| | H _{DC} | 200 Oe | |
| | Percent Initial Perm.(nom.) | 84.8% | |
| Percent Initial Perm.(min.) | 81.1% | | |
| Coating/Pkg | Coating Type: | Parylene N | |
| | Voltage Breakdown (min.) | 500 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 21,600 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|--------|---------|---------|---------|---------|---------|-------|-------|-------|-------|---|
| Winding Table | Wire Size | AWG | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | - |
| | | mm | 0.400 | 0.315 | 0.250 | 0.200 | 0.160 | 0.125 | 0.100 | 0.080 | 0.063 | 0.050 | - |
| | Single Layer | Turns | 11 | 14 | 19 | 24 | 30 | 38 | 49 | 61 | 77 | 96 | - |
| | | Rdc(Ω) | 18.3 m | 37.1 m | 80.1 m | 160.9 m | 319.9 m | 644.5 m | 1.3 | 2.6 | 5.3 | 10.4 | - |
| Full Winding | Turns | 11 | 17 | 26 | 41 | 63 | 98 | 151 | 234 | 362 | 560 | - | |
| | Rdc(Ω) | 18.3 m | 45.1 m | 109.6 m | 274.9 m | 671.8 m | 1.7 | 4.1 | 10.0 | 24.7 | 60.8 | - | |

