



Part Number: **FS-601040-2**
 Revision 20160816 - Generated 2016-Aug-16



| | | | |
|----------------------------|---|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 152.40 mm 153.90 mm | 6.000 in 6.059 in |
| ID | (nom. - bare core) (min. - after coating) | 81.28 mm 79.65 mm | 3.200 in 3.136 in |
| Ht | (nom. - bare core) (max. - after coating) | 25.40 mm 26.80 mm | 1.000 in 1.055 in |
| Mass | (approximate) | 2,090 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 8.81 cm ² | |
| | L _e - Eff. Mag. Path Length | 35.97 cm | |
| | V _e - Eff. Core Volume | 317 cm ³ | |
| | WA - Min. Eff. Window Area | 49.8 cm ² | |
| | sa - Surface Area | 674 cm ² | |
| | mlt - mean length per turn | 16.8 cm | |
| Inductance | μ _i (reference) | 40 | |
| | A _L value (nominal) | 127 nH/N ² | |
| | Test Winding | N=200, #18 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 7.8 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=1.000E+06, b=3.071E+08, c=3.524E+06, d=5.634E-14 | | |
| | B _{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 780 mW/cm ³ | |
| | Core Loss (maximum) | 897 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=6.314E-08, c=2.151, d=0.000 | | |
| | H _{DC} | 200 Oe | |
| | Percent Initial Perm.(nom.) | 64.0% | |
| | Percent Initial Perm.(min.) | 54.5% | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 4 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|---------|---------|--------|---------|---------|---------|-------|-------|--------|--------|-------|
| Winding Table | Wire Size | AWG | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 |
| | | mm | 3.150 | 2.500 | 2.000 | 1.600 | 1.250 | 1.000 | 0.800 | 0.630 | 0.500 | 0.400 | 0.315 |
| | Single Layer | Turns | 65 | 81 | 102 | 127 | 159 | 198 | 247 | 309 | 385 | 479 | 597 |
| | | Rdc(Ω) | 22.4 m | 44.4 m | 88.9 m | 176.1 m | 350.7 m | 694.5 m | 1.4 | 2.7 | 5.4 | 10.7 | 21.3 |
| Full Winding | Turns | 261 | 404 | 625 | 967 | 1,497 | 2,316 | 3,585 | 5,549 | 8,589 | 13,293 | 20,574 | |
| | Rdc(Ω) | 90.0 m | 221.5 m | 545.0 m | 1.3 | 3.3 | 8.1 | 20.0 | 49.2 | 121.2 | 298.3 | 734.3 | |

