



Part Number: **FS-065040-2**
 Revision 20160816 - Generated 2016-Aug-16



| | | | |
|----------------------------|---|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 16.64 mm 17.40 mm | 0.655 in 0.685 in |
| ID | (nom. - bare core) (min. - after coating) | 10.16 mm 9.53 mm | 0.400 in 0.375 in |
| Ht | (nom. - bare core) (max. - after coating) | 6.35 mm 7.11 mm | 0.250 in 0.280 in |
| Mass | (approximate) | 5.2 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.192 cm ² | |
| | L _e - Eff. Mag. Path Length | 4.11 cm | |
| | V _e - Eff. Core Volume | 0.789 cm ³ | |
| | WA - Min. Eff. Window Area | 0.713 cm ² | |
| | sa - Surface Area | 11.2 cm ² | |
| | mlt - mean length per turn | 2.69 cm | |
| Inductance | μ _i (reference) | 40 | |
| | A _L value (nominal) | 23 nH/N ² | |
| | Test Winding | N=70, #28 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.060 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 | 2,880 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|-------|
| Winding Table | Wire Size | AWG | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 |
| | | mm | 2.000 | 1.600 | 1.250 | 1.000 | 0.800 | 0.630 | 0.500 | 0.400 | 0.315 | 0.250 | 0.200 |
| | Single Layer | Turns | 10 | 13 | 17 | 21 | 27 | 34 | 44 | 55 | 69 | 86 | 108 |
| | | Rdc(Ω) | 1.4 m | 2.9 m | 6.0 m | 11.8 m | 24.1 m | 48.3 m | 99.4 m | 197.7 m | 394.4 m | 781.8 m | 1.6 |
| Full Winding | Turns | 9 | 14 | 21 | 33 | 51 | 79 | 123 | 190 | 295 | 456 | 706 | |
| | Rdc(Ω) | 1.3 m | 3.1 m | 7.4 m | 18.5 m | 45.6 m | 112.3 m | 278.0 m | 682.9 m | 1.7 | 4.1 | 10.2 | |

