



Part Number: **FS-350060-2**

Revision 20190529 - Generated 2019-May-29



(If coated, Max./Min. includes coating)

| | | | |
|----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max.) | 88.85 mm 90.00 mm | 3.498 in 3.543 in |
| ID | (nom. - bare core) (min.) | 66.01 mm 64.74 mm | 2.599 in 2.549 in |
| HT | (nom. - bare core) (max.) | 15.93 mm 17.20 mm | 0.627 in 0.677 in |
| Mass | (approximate) | 300 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 1.83 cm ² | |
| | L _e - Eff. Mag. Path Length | 24 cm | |
| | V _e - Eff. Core Volume | 43.9 cm ³ | |
| | WA - Min. Eff. Window Area | 32.9 cm ² | |
| | sa - Surface Area | 251 cm ² | |
| | mlt - mean length per turn | 9.20 cm | |
| Inductance | μ _i (reference) | 60 | |
| | A _L value (nominal) | 57 nH/N ² | |
| | Test Winding | N=100, #18 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.81 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=3.903E+08, c=3.785E+06, d=5.229E-14 | | |
| | B _{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 676 mW/cm ³ | |
| Core Loss (maximum) | 778 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=1.949E-07, c=2.099, d=0.000 | | |
| | H _{DC} | 150 Oe | |
| | Percent Initial Perm(nom.) | 58.1% | |
| Percent Initial Perm(min.) | 48.6% | | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 45 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 | 52 | 65 | 82 | 103 | 129 | 161 | 201 | 250 | 312 | 389 | 485 |
| | | Rdc(Ω) | 9.8 m | 19.6 m | 39.2 m | 78.4 m | 156.2 m | 310.0 m | 615.5 m | 1.2 | 2.4 | 4.8 | 9.5 |
| Full Winding | Turns | 172 | 267 | 413 | 639 | 989 | 1,530 | 2,369 | 3,666 | 5,674 | 8,782 | 13,592 | |
| | Rdc(Ω) | 32.5 m | 80.4 m | 197.7 m | 486.4 m | 1.2 | 2.9 | 7.3 | 17.9 | 43.9 | 108.2 | 266.3 | |

