



Part Number: MS-650060-2
Revision 20160816 - Generated 2016-Aug-16



| | | | |
|----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 165.10 mm 166.37 mm | 6.500 in 6.550 in |
| ID | (nom. - bare core) (min. - after coating) | 102.40 mm 101.13 mm | 4.031 in 3.981 in |
| Ht | (nom. - bare core) (max. - after coating) | 31.75 mm 33.02 mm | 1.250 in 1.300 in |
| Mass | (approximate) | 2,400 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 9.87 cm ² | |
| | L _e - Eff. Mag. Path Length | 41.2 cm | |
| | V _e - Eff. Core Volume | 415 cm ³ | |
| | WA - Min. Eff. Window Area | 80.3 cm ² | |
| | sa - Surface Area | 838 cm ² | |
| | mlt - mean length per turn | 18.2 cm | |
| Inductance | μ _i (reference) | 60 | |
| | A _L value (nominal) | 181 nH/N ² | |
| | Test Winding | N=100, #22 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 4.4 V | |
| AL tolerance | ±8% | | |
| Core Loss | Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ | | |
| | where B _{pk} expressed in gauss, f expressed in hertz, and: a=7.890E+09, b=7.111E+08, c=8.980E+06, d=2.846E-14 | | |
| | B _{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 323 mW/cm ³ | |
| Core Loss (maximum) | 372 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=2.151E-06, c=1.841, d=0.000 | | |
| | H _{DC} | 100 Oe | |
| | Percent Initial Perm(nom.) | 49.2% | |
| Percent Initial Perm(min.) | 40.9% | | |
| 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 | 83 | 104 | 130 | 162 | 203 | 253 | 315 | 393 | 489 | 609 | 758 |
| | | Rdc(Ω) | 31.0 m | 61.8 m | 122.9 m | 243.7 m | 485.6 m | 962.5 m | 1.9 | 3.8 | 7.5 | 14.8 | 29.3 |
| Full Winding | Turns | 420 | 651 | 1,007 | 1,559 | 2,413 | 3,734 | 5,780 | 8,946 | 13,846 | 21,429 | 33,167 | |
| | Rdc(Ω) | 157.0 m | 387.1 m | 952.3 m | 2.3 | 5.8 | 14.2 | 35.0 | 86.1 | 211.9 | 521.5 | 1.3 k | |

