



Part Number: MS-080060-2
Revision 20160816 - Generated 2016-Aug-16



| | | | |
|-----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 20.32 mm 21.08 mm | 0.800 in 0.830 in |
| ID | (nom. - bare core) (min. - after coating) | 12.70 mm 12.07 mm | 0.500 in 0.475 in |
| Ht | (nom. - bare core) (max. - after coating) | 6.35 mm 7.11 mm | 0.250 in 0.280 in |
| Mass | (approximate) | 6.7 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.226 cm ² | |
| | L _e - Eff. Mag. Path Length | 5.09 cm | |
| | V _e - Eff. Core Volume | 1.15 cm ³ | |
| | WA - Min. Eff. Window Area | 1.14 cm ² | |
| | sa - Surface Area | 15.5 cm ² | |
| | mlt - mean length per turn | 2.93 cm | |
| Inductance | μ _i (reference) | 60 | |
| | A _L value (nominal) | 32 nH/N ² | |
| | Test Winding | N=90, #28 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.090 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=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 | 1,800 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|-------|-------|--------|--------|--------|---------|---------|---------|---------|---------|-------|
| Winding Table | Wire Size | AWG | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| | | mm | 2.500 | 2.000 | 1.600 | 1.250 | 1.000 | 0.800 | 0.630 | 0.500 | 0.400 | 0.315 | 0.250 |
| | Single Layer | Turns | 10 | 13 | 17 | 22 | 28 | 35 | 44 | 56 | 70 | 88 | 110 |
| | | Rdc(Ω) | 1.0 m | 2.0 m | 4.1 m | 8.5 m | 17.1 m | 34.1 m | 68.1 m | 137.9 m | 274.2 m | 548.2 m | 1.1 |
| Full Winding | Turns | 9 | 14 | 22 | 34 | 53 | 82 | 127 | 197 | 305 | 472 | 731 | |
| | Rdc(Ω) | 0.9 m | 2.1 m | 5.3 m | 13.1 m | 32.4 m | 79.8 m | 196.7 m | 485.2 m | 1.2 | 2.9 | 7.2 | |

