



Part Number: MS-226090-2
Revision 20160816 - Generated 2016-Aug-16



| | | | |
|-----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 57.15 mm 58.04 mm | 2.250 in 2.285 in |
| ID | (nom. - bare core) (min. - after coating) | 26.39 mm 25.58 mm | 1.039 in 1.007 in |
| Ht | (nom. - bare core) (max. - after coating) | 15.24 mm 16.13 mm | 0.600 in 0.635 in |
| Mass | (approximate) | 170 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 2.29 cm ² | |
| | L _e - Eff. Mag. Path Length | 12.506 cm | |
| | V _e - Eff. Core Volume | 28.6 cm ³ | |
| | WA - Min. Eff. Window Area | 5.14 cm ² | |
| | sa - Surface Area | 105 cm ² | |
| | mlt - mean length per turn | 7.75 cm | |
| Inductance | μ _i (reference) | 90 | |
| | A _L value (nominal) | 207 nH/N ² | |
| | Test Winding | N=60, #18 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.61 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=3.994E-06, c=1.883, d=0.000 | | |
| | H _{DC} | 50 Oe | |
| | Percent Initial Perm.(nom.) | 61.3% | |
| Percent Initial Perm.(min.) | 52.9% | | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 80 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 | 19 | 24 | 31 | 39 | 49 | 62 | 78 | 97 | 122 | 152 | 190 |
| | | Rdc(Ω) | 3.0 m | 6.1 m | 12.5 m | 25.0 m | 50.0 m | 100.5 m | 201.2 m | 397.8 m | 795.8 m | 1.6 | 3.1 |
| Full Winding | Turns | 27 | 42 | 64 | 100 | 154 | 239 | 370 | 572 | 886 | 1,371 | 2,122 | |
| | Rdc(Ω) | 4.3 m | 10.6 m | 25.8 m | 64.1 m | 157.0 m | 387.5 m | 954.2 m | 2.3 | 5.8 | 14.2 | 35.0 | |

