



Part Number: MP-225060-2
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) | 35.56 mm 34.75 mm | 1.400 in 1.368 in |
| Ht | (nom. - bare core) (max. - after coating) | 13.97 mm 14.86 mm | 0.550 in 0.585 in |
| Mass | (approximate) | 150 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 1.44 cm ² | |
| | L _e - Eff. Mag. Path Length | 14.296 cm | |
| | V _e - Eff. Core Volume | 20.7 cm ³ | |
| | WA - Min. Eff. Window Area | 9.48 cm ² | |
| | sa - Surface Area | 109 cm ² | |
| | mlt - mean length per turn | 7.04 cm | |
| Inductance | μ _i (reference) | 60 | |
| | A _L value (nominal) | 75 nH/N ² | |
| | Test Winding | N=80, #18 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.51 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=9.919E+09, b=9.488E+08, c=4.486E+06, d=3.238E-14 | | |
| | B _{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 359 mW/cm ³ | |
| Core Loss (maximum) | 413 mW/cm ³ | | |
| DC Saturation | %μ _i = $\frac{1}{a + b \cdot H^c} + d$ | | |
| | where H expressed in oersteds, and: a=1.000E-02, b=1.212E-06, c=1.961, d=0.000 | | |
| | H _{DC} | 100 Oe | |
| | Percent Initial Perm.(nom.) | 49.6% | |
| Percent Initial Perm.(min.) | 40.8% | | |
| 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 | 27 | 34 | 43 | 54 | 68 | 85 | 106 | 133 | 166 | 207 | 259 |
| | | Rdc(Ω) | 3.9 m | 7.8 m | 15.7 m | 31.4 m | 63.0 m | 125.2 m | 248.2 m | 495.3 m | 983.2 m | 1.9 | 3.9 |
| Full Winding | Turns | 50 | 77 | 119 | 184 | 285 | 441 | 682 | 1,056 | 1,635 | 2,530 | 3,916 | |
| | Rdc(Ω) | 7.2 m | 17.7 m | 43.6 m | 107.1 m | 263.9 m | 649.4 m | 1.6 | 3.9 | 9.7 | 23.8 | 58.7 | |

