



Part Number: MP-015060-8
 Revision 20160816 - Generated 2016-Aug-16



| | | | |
|-----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 3.94 mm 4.14 mm | 0.155 in 0.163 in |
| ID | (nom. - bare core) (min. - after coating) | 2.21 mm 2.01 mm | 0.087 in 0.079 in |
| Ht | (nom. - bare core) (max. - after coating) | 2.54 mm 2.74 mm | 0.100 in 0.108 in |
| Mass | (approximate) | 0.15 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.0211 cm ² | |
| | L _e - Eff. Mag. Path Length | 0.942 cm | |
| | V _e - Eff. Core Volume | 0.0197 cm ³ | |
| | WA - Min. Eff. Window Area | 0.0316 cm ² | |
| | sa - Surface Area | 0.776 cm ² | |
| | mlt - mean length per turn | 0.862 cm | |
| Inductance | μ _i (reference) | 60 | |
| | A _L value (nominal) | 17 nH/N ² | |
| | Test Winding | N=30, #32 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.003 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=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 | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ | | |
| | 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: | Parylene N | |
| | Voltage Breakdown (min.) | 500 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 27,000 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|--------|---------|---------|---------|---------|---------|-------|-------|-------|---|---|
| Winding Table | Wire Size | AWG | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | - | - |
| | | mm | 0.315 | 0.250 | 0.200 | 0.160 | 0.125 | 0.100 | 0.080 | 0.063 | 0.050 | - | - |
| | Single Layer | Turns | 12 | 16 | 21 | 26 | 33 | 42 | 53 | 67 | 84 | - | - |
| | | Rdc(Ω) | 22.0 m | 46.7 m | 97.4 m | 191.8 m | 387.1 m | 783.6 m | 1.6 | 3.2 | 6.3 | - | - |
| Full Winding | Turns | 13 | 20 | 31 | 49 | 75 | 116 | 180 | 279 | 431 | - | - | |
| | Rdc(Ω) | 23.8 m | 58.3 m | 143.8 m | 361.4 m | 879.8 m | 2.2 | 5.3 | 13.2 | 32.3 | - | - | |

