



Part Number: MS-018060-8
Revision 20160816 - Generated 2016-Aug-16



| | | | |
|-----------------------------|--|------------------------|----------------------|
| OD | (nom. - bare core) (max. - after coating) | 4.65 mm 5.21 mm | 0.183 in 0.205 in |
| ID | (nom. - bare core) (min. - after coating) | 2.36 mm 1.93 mm | 0.093 in 0.076 in |
| Ht | (nom. - bare core) (max. - after coating) | 2.54 mm 3.30 mm | 0.100 in 0.130 in |
| Mass | (approximate) | 0.17 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.0285 cm ² | |
| | L _e - Eff. Mag. Path Length | 1.06 cm | |
| | V _e - Eff. Core Volume | 0.0302 cm ³ | |
| | WA - Min. Eff. Window Area | 0.0293 cm ² | |
| | sa - Surface Area | 1.15 cm ² | |
| | mlt - mean length per turn | 1.08 cm | |
| Inductance | μ _i (reference) | 60 | |
| | A _L value (nominal) | 20 nH/N ² | |
| | Test Winding | N=30, #32 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.004 V | |
| AL tolerance | ±15% | | |
| 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 | %μ _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: | 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 | 15 | 20 | 25 | 32 | 40 | 51 | 64 | 81 | - | - |
| | | Rdc(Ω) | 27.7 m | 55.1 m | 116.8 m | 232.1 m | 472.6 m | 939.5 m | 1.9 | 3.8 | 7.7 | - | - |
| Full Winding | Turns | 12 | 19 | 29 | 45 | 69 | 107 | 166 | 257 | 398 | - | - | |
| | Rdc(Ω) | 27.7 m | 69.8 m | 169.3 m | 417.9 m | 1.0 | 2.5 | 6.2 | 15.3 | 37.6 | - | - | |

