



Part Number: **T44-10**

Revision 20190524 - Generated 2019-May-30



| | | | | | | | | | | | | |
|----------------------------|--|--|----------------------|--------|--------|---------|---------|---------|---------|-------|-------|-------|
| OD | (nom. - bare core) (max. - after coating) | 11.18 mm 11.68 mm | 0.440 in 0.460 in | | | | | | | | | |
| ID | (nom. - bare core) (min. - after coating) | 5.82 mm 5.31 mm | 0.229 in 0.209 in | | | | | | | | | |
| Ht | (nom. - bare core) (max. - after coating) | 4.04 mm 4.55 mm | 0.159 in 0.179 in | | | | | | | | | |
| Mass | (approximate) | 1.3 grams | | | | | | | | | | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.0990 cm ² | | | | | | | | | | |
| | L _e - Eff. Mag. Path Length | 2.68 cm | | | | | | | | | | |
| | V _e - Eff. Core Volume | 0.266 cm ³ | | | | | | | | | | |
| | WA - Min. Eff. Window Area | 0.221 cm ² | | | | | | | | | | |
| | sa - Surface Area | 4.81 cm ² | | | | | | | | | | |
| Inductance | μ _i (reference) | 6 | | | | | | | | | | |
| | A _L value (nominal) | 3.3 nH/N ² | | | | | | | | | | |
| | Test Winding | N=66, #30 AWG | | | | | | | | | | |
| | Frequency | 1 MHz | | | | | | | | | | |
| | Voltage on Agilent 4284A | 1.0 V | | | | | | | | | | |
| Core Loss & Q | A _L tolerance | ±5% | | | | | | | | | | |
| | Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$ | where B _{pk} expressed in gauss, f expressed in hertz, and: a=4.00E+09, b=3.00E+08, c=2.70E+06, d=8.00E-16 | | | | | | | | | | |
| DC Saturation | Q test winding | N=10, #20 AWG | | | | | | | | | | |
| | Q frequency | 25 MHz | | | | | | | | | | |
| | Q min on HP4342A | 190 | | | | | | | | | | |
| | %μ _i = $\frac{1}{a + b \cdot H^c} + d$ | where H expressed in oersteds, and: a=1.00E-02, b=5.54E-09, c=1.69, d=0.00 | | | | | | | | | | |
| | H _{DC} | 200 Oe | | | | | | | | | | |
| Coating/Pkg | Percent Initial Perm(nom.) | 99.6% | | | | | | | | | | |
| | Percent Initial Perm(min.) | 99.4% | | | | | | | | | | |
| | Coating Type: | Black/Clear Epoxy Paint | | | | | | | | | | |
| Winding Table | Voltage Breakdown (min.) | 500 Vrms, 60Hz | | | | | | | | | | |
| | Limit | 3 mA, 5 s | | | | | | | | | | |
| | Package Quantity | 10,000 Pcs/Box | | | | | | | | | | |
| | Wire Size | AWG | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
| Single Layer | mm | 1.000 | 0.800 | 0.630 | 0.500 | 0.400 | 0.315 | 0.250 | 0.200 | 0.160 | 0.125 | 0.100 |
| | Turns | 11 | 14 | 18 | 23 | 29 | 37 | 47 | 59 | 74 | 93 | 116 |
| Full Winding | Rdc(Ω) | 4.2 m | 8.4 m | 17.3 m | 35.1 m | 70.3 m | 142.7 m | 288.3 m | 575.7 m | 1.1 | 2.3 | 4.6 |
| | Turns | 10 | 16 | 25 | 38 | 59 | 91 | 141 | 219 | 339 | 524 | 812 |
| Full Winding | Rdc(Ω) | 3.8 m | 9.6 m | 24.0 m | 58.0 m | 143.1 m | 351.0 m | 865.0 m | 2.1 | 5.3 | 12.9 | 31.9 |

