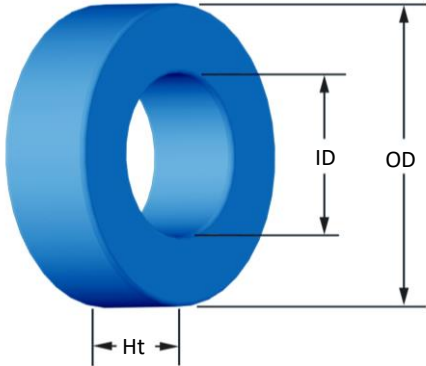




Part Number: MS-092125-2

Revision 2021-Sep-15 - Generated 2021-Sep-15



(If coated, Max./Min. includes coating)

| | | | |
|----------------------------|--|------------------------|----------|
| OD | (nom. - bare core) | 23.57 mm | 0.928 in |
| | (max.) | 24.28 mm | 0.956 in |
| ID | (nom. - bare core) | 14.40 mm | 0.567 in |
| | (min.) | 13.77 mm | 0.542 in |
| HT | (nom. - bare core) | 8.89 mm | 0.350 in |
| | (max.) | 9.70 mm | 0.382 in |
| Mass | (approximate) | 13 grams | |
| Magnetic Dimensions | A_e - Eff. Mag. Cross Section | 0.388 cm ² | |
| | L_e - Eff. Mag. Path Length | 5.88 cm | |
| | V_e - Eff. Core Volume | 2.28 cm ³ | |
| | WA - Min. Eff. Window Area | 1.49 cm ² | |
| | sa - Surface Area | 21.8 cm ² | |
| | mlt - mean length per turn | 3.68 cm | |
| | μ_i (reference) | 125 | |
| Inductance | A_L value (nominal) | 105 nH/N ² | |
| | Test Winding | N=80, #26 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.14 V | |
| | AL tolerance | ±8% | |
| Core Loss | Core Loss(mW/cm ³): $\frac{f}{Bpk^3} + \frac{f}{Bpk^{2.3}} + \frac{f}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$ | | |
| | where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.394E+10$, $b=1.034E+09$, $c=1.244E+07$, $d=4.007E-14$ | | |
| | B_{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 276 mW/cm ³ | |
| Core Loss (maximum) | 318 mW/cm ³ | | |
| DC Saturation | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ | | |
| | where H expressed in oersteds, and: $a=1.000E-02$, $b=7.884E-06$, $c=1.883$, $d=0.000$ | | |
| | H_{DC} | 40 Oe | |
| | Percent Initial Perm(nom.) | 55.0% | |
| Percent Initial Perm(min.) | 46.4% | | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 1,080 Pcs/Box | |

| | | | | | | | | | | | | | |
|----------------------|---------------------|--------|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|-------|
| Winding Table | Wire Size | AWG | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 |
| | | mm | 2.500 | 2.000 | 1.600 | 1.250 | 1.000 | 0.800 | 0.630 | 0.500 | 0.400 | 0.315 | 0.250 |
| | Single Layer | Turns | 12 | 15 | 20 | 25 | 32 | 40 | 51 | 64 | 80 | 101 | 126 |
| | | Rdc(Ω) | 1.4 m | 2.9 m | 6.1 m | 12.1 m | 24.6 m | 49.0 m | 99.3 m | 198.2 m | 394.0 m | 791.0 m | 1.6 |
| Full Winding | Turns | 12 | 19 | 29 | 45 | 69 | 107 | 166 | 257 | 397 | 615 | 952 | |
| | Rdc(Ω) | 1.4 m | 3.6 m | 8.8 m | 21.8 m | 53.1 m | 131.0 m | 323.2 m | 795.8 m | 2.0 | 4.8 | 11.9 | |

