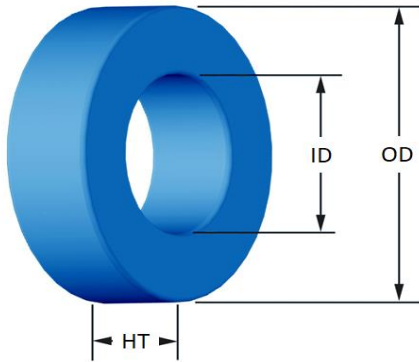




Part Number: **OD-226090-2**

Revision: 2023-Dec-06



| (If coated, Max./Min. includes coating) | | mm | in |
|---|--|--------------------|--------------------|
| OD | (nom. - bare core) | 57.15 | 2.250 |
| | (max.) | 58.04 | 2.285 |
| ID | (nom. - bare core) | 26.39 | 1.039 |
| | (min.) | 25.58 | 1.007 |
| HT | (nom. - bare core) | 15.24 | 0.600 |
| | (max.) | 16.13 | 0.635 |
| Mass | (approximate) | 210 | grams |
| Magnetic Dimensions | A_e - Eff. Mag. Cross Section | 2.29 | cm ² |
| | L_e - Eff. Mag. Path Length | 12.506 | cm |
| | V_e - Eff. Core Volume | 28.6 | cm ³ |
| | W_A - Min. Eff. Window Area | 5.14 | cm ² |
| | s_a - Surface Area | 105 | cm ² |
| | m_{lt} - mean length per turn | 7.75 | cm |
| Inductance | μ_i (reference) | 90 | |
| | A_L value (nominal) | 207 | nH/N ² |
| | Test Winding | 60 Turns | AWG# 18 |
| | Frequency | 10k | Hz |
| | Voltage on Agilent 4284A | 0.61 | V |
| AL tolerance | ±8% | | |
| Core Loss | $\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$ | | |
| | where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.000E+06$, $b=7.629E+08$, $c=4.688E+06$, $d=4.273E-14$ | | |
| | B_{pk} | 1000 | G |
| | frequency | 50 k | Hz |
| | Core Loss (nominal) | 443 | mW/cm ³ |
| Core Loss (maximum) | 510 | mW/cm ³ | |
| DC Saturation | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ | | |
| | where H expressed in oersteds, and: $a=1.000E-02$, $b=4.343E-07$, $c=2.124$, $d=0.000$ | | |
| | H_{DC} | 50 | Oe |
| | Percent Initial Perm(nom.) | 85.0 | % |
| Percent Initial Perm(min.) | 79.4 | % | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 60 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 | 19 | 24 | 31 | 39 | 49 | 62 | 78 | 97 | 122 | 152 | 190 |
| | | Rdc(Ω) | 3.0 m | 6.1 m | 12.5 m | 25.0 m | 50.0 m | 100.5 m | 201.2 m | 397.8 m | 795.8 m | 1.6 | 3.1 |
| Full Winding | Turns | 27 | 42 | 64 | 100 | 154 | 239 | 370 | 572 | 886 | 1,371 | 2,122 | |
| | Rdc(Ω) | 4.3 m | 10.6 m | 25.8 m | 64.1 m | 157.0 m | 387.5 m | 954.2 m | 2.3 | 5.8 | 14.2 | 35.0 | |

