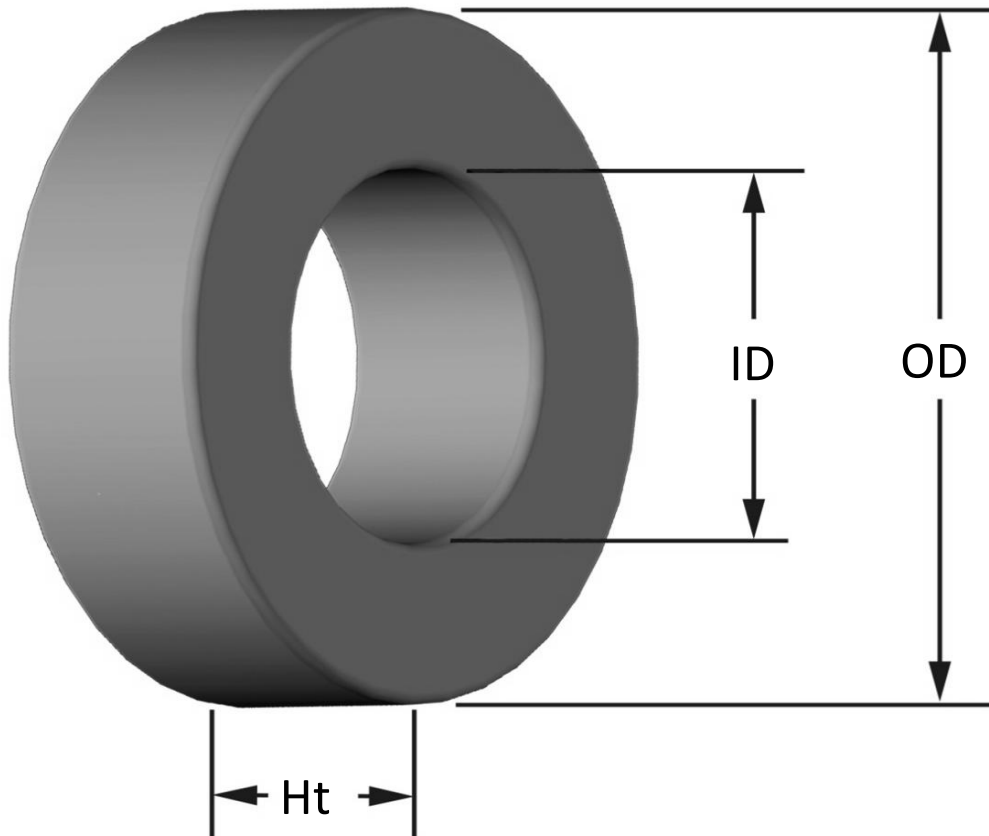




Part Number: **T12-15**

Revision 20190524 - Generated 2019-May-30



| | | | | | | | | | | | | | |
|----------------------------|--|--|----------------------|---------|---------|---------|---------|-------|-------|-------|------|------|------|
| OD | (nom. - bare core) (max. - after coating) | 3.18 mm 3.30 mm | 0.125 in 0.130 in | | | | | | | | | | |
| ID | (nom. - bare core) (min. - after coating) | 1.57 mm 1.45 mm | 0.062 in 0.057 in | | | | | | | | | | |
| Ht | (nom. - bare core) (max. - after coating) | 1.27 mm 1.40 mm | 0.050 in 0.055 in | | | | | | | | | | |
| Mass | (approximate) | 0.05 grams | | | | | | | | | | | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.0100 cm ² | | | | | | | | | | | |
| | L _e - Eff. Mag. Path Length | 0.750 cm | | | | | | | | | | | |
| | V _e - Eff. Core Volume | 0.00770 | | | | | | | | | | | |
| | WA - Min. Eff. Window Area | 0.0165 cm ² | | | | | | | | | | | |
| | sa - Surface Area | 0.395 cm ² | | | | | | | | | | | |
| Inductance | μ _i (reference) | 25 | | | | | | | | | | | |
| | A _L value (nominal) | 5 nH/N ² | | | | | | | | | | | |
| | Test Winding | N=25, #36 AWG | | | | | | | | | | | |
| | Frequency | 1 MHz | | | | | | | | | | | |
| | Voltage on Agilent 4284A | 0.11 V | | | | | | | | | | | |
| Core Loss | A _L tolerance | ±10% | | | | | | | | | | | |
| | 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=1.90E+09, b=2.00E+08, c=9.00E+05, d=5.00E-15 | | | | | | | | | | | |
| | B _{pk} | 140 G | | | | | | | | | | | |
| | frequency | 100 kHz | | | | | | | | | | | |
| DC Saturation | Core Loss (nominal) | 32 mW/cm ³ | | | | | | | | | | | |
| | Core Loss (maximum) | 36 mW/cm ³ | | | | | | | | | | | |
| | %μ _i = | $\frac{1}{a + b \cdot H^c} + d$ | | | | | | | | | | | |
| | where H expressed in oersteds, and: | a=1.00E-02, b=1.78E-06, c=1.43, d=0.00 | | | | | | | | | | | |
| | H _{DC} | 200 Oe | | | | | | | | | | | |
| Coating/Pkg | Percent Initial Perm(nom.) | 74.7% | | | | | | | | | | | |
| | Percent Initial Perm(min.) | 69.4% | | | | | | | | | | | |
| | Coating Type: | Parylene C | | | | | | | | | | | |
| | Voltage Breakdown (min.) | 500 Vrms, 60Hz | | | | | | | | | | | |
| Winding Table | Limit | 3 mA, 5 s | | | | | | | | | | | |
| | Package Quantity | 250,000 Pcs/Box | | | | | | | | | | | |
| | Wire Size | AWG | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | #N/A | #N/A | #N/A |
| | | mm | 0.250 | 0.200 | 0.160 | 0.125 | 0.100 | 0.080 | 0.063 | 0.050 | #N/A | #N/A | #N/A |
| | Single Layer | Turns | 11 | 14 | 18 | 23 | 30 | 38 | 47 | 60 | #N/A | #N/A | #N/A |
| Rdc(Ω) | | 20.0 m | 40.5 m | 82.8 m | 168.3 m | 349.0 m | 703.1 m | 1.4 | 2.8 | #N/A | #N/A | #N/A | |
| Full Winding | Turns | 11 | 16 | 25 | 39 | 60 | 93 | 145 | 224 | #N/A | #N/A | #N/A | |
| | Rdc(Ω) | 20.0 m | 46.3 m | 115.0 m | 285.3 m | 698.0 m | 1.7 | 4.3 | 10.5 | #N/A | #N/A | #N/A | |

