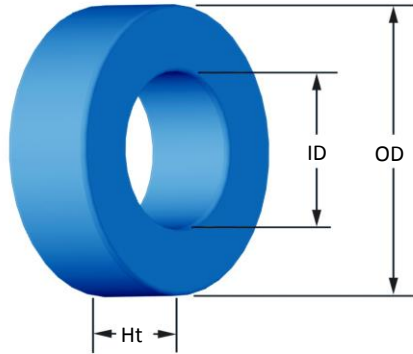




Part Number: **FS-131075-2**

Revision 20190626 - Generated 2019-Jun-27



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

| | | | |
|-----------------------------|--|------------------------|----------|
| OD | (nom. - bare core) | 33.02 mm | 1.300 in |
| | (max.) | 33.83 mm | 1.332 in |
| ID | (nom. - bare core) | 19.94 mm | 0.785 in |
| | (min.) | 19.30 mm | 0.760 in |
| HT | (nom. - bare core) | 8.76 mm | 0.345 in |
| | (max.) | 9.70 mm | 0.382 in |
| Mass | (approximate) | 31 grams | |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 0.551 cm ² | |
| | L _e - Eff. Mag. Path Length | 8.15 cm | |
| | V _e - Eff. Core Volume | 4.49 cm ³ | |
| | WA - Min. Eff. Window Area | 2.93 cm ² | |
| | sa - Surface Area | 37.8 cm ² | |
| | mlt - mean length per turn | 4.36 cm | |
| Inductance | μ _i (reference) | 75 | |
| | A _l value (nominal) | 63.8 nH/N ² | |
| | Test Winding | N=70, #22 AWG | |
| | Frequency | 10 kHz | |
| | Voltage on Agilent 4284A | 0.17 V | |
| | AL tolerance | ±8% | |
| Core Loss | Core Loss(mW/cm ³): $\frac{f}{Bpk^3} + \frac{f}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$ | | |
| | where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.883E+08, b=5.098E+08, c=1.162E+06, d=5.024E-14 | | |
| | B _{pk} | 1000 G | |
| | frequency | 50 kHz | |
| | Core Loss (nominal) | 772 mW/cm ³ | |
| Core Loss (maximum) | 887 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=3.486E-06, c=1.682, d=0.000 | | |
| | H _{DC} | 80 Oe | |
| | Percent Initial Perm.(nom.) | 64.4% | |
| Percent Initial Perm.(min.) | 57.1% | | |
| Coating/Pkg | Coating Type: | Blue Epoxy | |
| | Voltage Breakdown (min.) | 1000 Vrms | |
| | Limit | 0.1 mA, 5 s | |
| | Package Quantity | 576 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 | 14 | 18 | 22 | 29 | 36 | 46 | 58 | 73 | 91 | 114 | 142 |
| | | Rdc(Ω) | 1.3 m | 2.6 m | 5.0 m | 10.5 m | 20.6 m | 41.9 m | 84.1 m | 168.3 m | 333.7 m | 664.9 m | 1.3 |
| Full Winding | Turns | 15 | 24 | 37 | 57 | 88 | 136 | 211 | 326 | 504 | 780 | 1,208 | |
| | Rdc(Ω) | 1.3 m | 3.4 m | 8.4 m | 20.5 m | 50.4 m | 124.0 m | 305.9 m | 751.8 m | 1.8 | 4.5 | 11.2 | |

