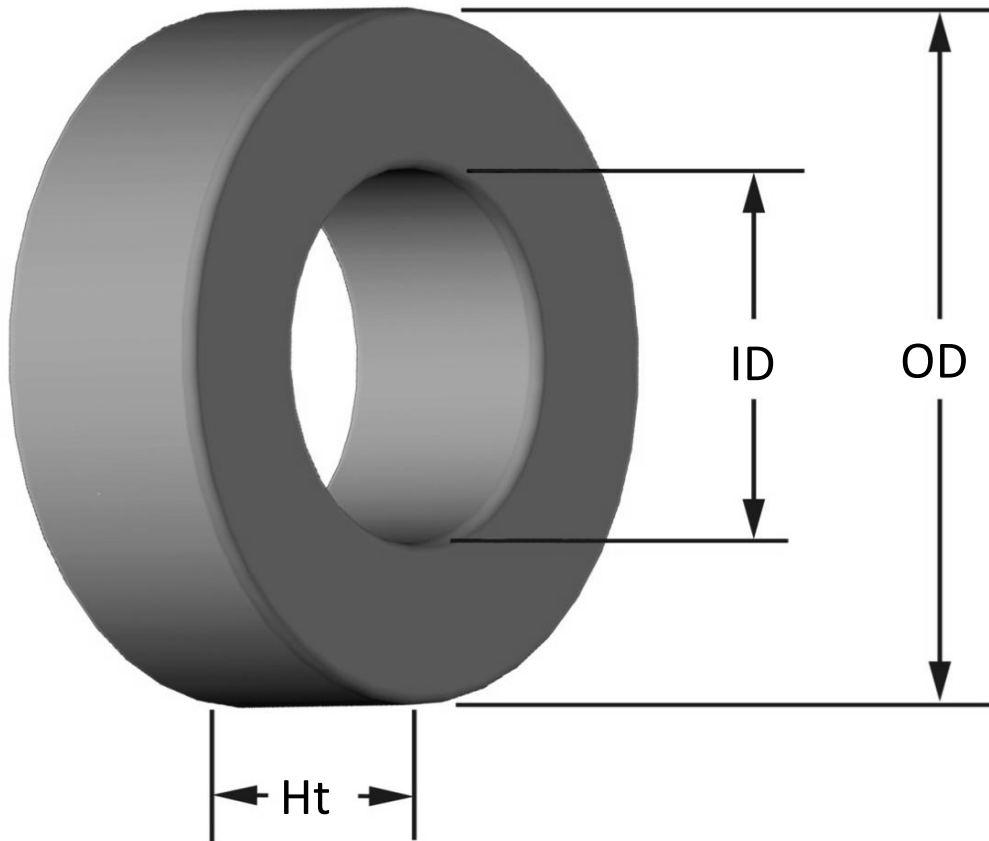




**Part Number:** **T130-0**

Revision 20190524 - Generated 2019-May-30



|                            |  |                       |                      |
|----------------------------|--|-----------------------|----------------------|
| <b>OD</b>                  | (nom. - bare core)<br>(max. - after coating)   | 33.02 mm<br>33.53 mm  | 1.300 in<br>1.320 in |
| <b>ID</b>                  | (nom. - bare core)<br>(min. - after coating)   | 19.81 mm<br>19.30 mm  | 0.780 in<br>0.760 in |
| <b>Ht</b>                  | (nom. - bare core)<br>(max. - after coating)   | 11.10 mm<br>11.73 mm  | 0.437 in<br>0.462 in |
| <b>Mass</b>                | (approximate)  | 13 grams              |                      |
| <b>Magnetic Dimensions</b> | A <sub>e</sub> - Eff. Mag. Cross Section   | 0.698 cm <sup>2</sup> |                      |
|                            | L <sub>e</sub> - Eff. Mag. Path Length   | 8.28 cm               |                      |
|                            | V <sub>e</sub> - Eff. Core Volume  | 5.78 cm <sup>3</sup>  |                      |
|                            | WA - Min. Eff. Window Area   | 2.93 cm <sup>2</sup>  |                      |
|                            | sa - Surface Area  | 39.8 cm <sup>2</sup>  |                      |
|                            | mlt - mean length per turn   | 4.73 cm               |                      |
| <b>Inductance</b>          | μ <sub>i</sub> (reference)   | 1                     |                      |
|                            | A <sub>L</sub> value (nominal)   | 1.5 nH/N <sup>2</sup> |                      |
|                            | Test Winding   | N/A                   |                      |
|                            | Frequency  | N/A                   |                      |
|                            | Voltage on Agilent 4284A   | N/A                   |                      |
| A <sub>L</sub> tolerance   | Ref Only   |                       |                      |
| <b>Core Loss</b>           | $\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ <p>where B<sub>pk</sub> expressed in gauss, f expressed in hertz, and:<br/>a=1.00E+99, b=1.00E+99, c=1.00E+99, d=0.00E+00</p> |                       |                      |
|                            | B <sub>pk</sub>  | 140 G                 |                      |
|                            | frequency  | 100 kHz               |                      |
|                            | Core Loss (nominal)  | 0 mW/cm <sup>3</sup>  |                      |
|                            | Core Loss (maximum)  | 0 mW/cm <sup>3</sup>  |                      |
| <b>DC Saturation</b>       | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ <p>where H expressed in oersteds, and:<br/>a=1.00E-02, b=0.00E+00, c=0.00, d=0.00</p>   |                       |                      |
|                            | H <sub>DC</sub>  | 200 Oe                |                      |
|                            | Percent Initial Perm(nom.)   | 100.0%                |                      |
|                            | Percent Initial Perm(min.)   | 100.0%                |                      |
| <b>Coating/Pkg</b>         | Coating Type:  | Tan/Tan Epoxy Paint   |                      |
|                            | Voltage Breakdown (min.)   | 500 Vrms, 60Hz        |                      |
|                            | Limit  | 3 mA, 5 s             |                      |
|                            | Package Quantity   | 500 Pcs/Box           |                      |

|                      |                     |        |       |       |        |        |         |         |         |         |         |         |       |
|----------------------|---------------------|--------|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|-------|
| <b>Winding Table</b> | <b>Wire Size</b>    | 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 |
|                      | <b>Single Layer</b> | Turns  | 14    | 18    | 22     | 29     | 36      | 46      | 58      | 73      | 91      | 114     | 142   |
|                      |                     | Rdc(Ω) | 1.4 m | 2.8 m | 5.4 m  | 11.4 m | 22.4 m  | 45.6 m  | 91.4 m  | 182.9 m | 362.6 m | 722.4 m | 1.4   |
| <b>Full Winding</b>  | Turns               | 15     | 24    | 37    | 57     | 88     | 136     | 211     | 326     | 504     | 781     | 1,208   |       |
|                      | Rdc(Ω)              | 1.5 m  | 3.7 m | 9.1 m | 22.3 m | 54.8 m | 134.7 m | 332.4 m | 816.7 m | 2.0     | 4.9     | 12.2    |       |

