



**Part Number:** T94-0

Revision 20190524 - Generated 2019-May-30



|                            |  |                        |                      |
|----------------------------|--|------------------------|----------------------|
| <b>OD</b>                  | (nom. - bare core)<br>(max. - after coating)   | 23.93 mm<br>24.43 mm   | 0.942 in<br>0.962 in |
| <b>ID</b>                  | (nom. - bare core)<br>(min. - after coating)   | 14.22 mm<br>13.72 mm   | 0.560 in<br>0.540 in |
| <b>Ht</b>                  | (nom. - bare core)<br>(max. - after coating)   | 7.92 mm<br>8.56 mm     | 0.312 in<br>0.337 in |
| <b>Mass</b>                | (approximate)  | 4.8 grams              |                      |
| <b>Magnetic Dimensions</b> | A <sub>e</sub> - Eff. Mag. Cross Section   | 0.362 cm <sup>2</sup>  |                      |
|                            | L <sub>e</sub> - Eff. Mag. Path Length   | 5.97 cm                |                      |
|                            | V <sub>e</sub> - Eff. Core Volume  | 2.16 cm <sup>3</sup>   |                      |
|                            | WA - Min. Eff. Window Area   | 1.48 cm <sup>2</sup>   |                      |
|                            | sa - Surface Area  | 21.0 cm <sup>2</sup>   |                      |
|                            | mlt - mean length per turn   | 3.47 cm                |                      |
| <b>Inductance</b>          | μ <sub>i</sub> (reference)   | 1                      |                      |
|                            | A <sub>L</sub> value (nominal)   | 1.06 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>           | $\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ |                        |                      |
|                            | 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                             |                        |                      |
|                            | 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>       | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$   |                        |                      |
|                            | where H expressed in oersteds, and:<br>a=1.00E-02, b=0.00E+00, c=0.00, d=0.00  |                        |                      |
|                            | 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   | 1,250 Pcs/Box          |                      |

|                      |                     |        |       |       |        |        |         |         |         |         |         |         |       |
|----------------------|---------------------|--------|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|-------|
| <b>Winding Table</b> | <b>Wire Size</b>    | 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 |
|                      | <b>Single Layer</b> | Turns  | 12    | 15    | 20     | 25     | 32      | 40      | 51      | 64      | 80      | 100     | 126   |
|                      |                     | Rdc(Ω) | 1.4 m | 2.7 m | 5.7 m  | 11.4 m | 23.2 m  | 46.2 m  | 93.6 m  | 186.9 m | 371.5 m | 738.5 m | 1.5   |
| <b>Full Winding</b>  | Turns               | 12     | 19    | 29    | 44     | 69     | 106     | 165     | 255     | 394     | 610     | 944     |       |
|                      | Rdc(Ω)              | 1.4 m  | 3.4 m | 8.3 m | 20.1 m | 50.1 m | 122.4 m | 302.9 m | 744.6 m | 1.8     | 4.5     | 11.1    |       |

