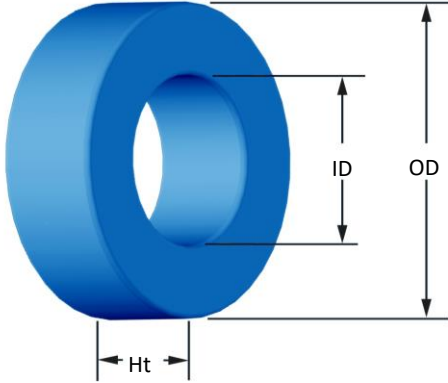




Part Number:

**SH-109026-2**

Revision 20170403 - Generated 2017-Apr-03



|                            |   |  |  |
|----------------------------|---|--|--|
| <b>OD</b>                  | (nom. - bare core)<br>(max. - after coating)  | 26.92 mm<br>27.81 mm   | 1.060 in<br>1.095 in   |
| <b>ID</b>                  | (nom. - bare core)<br>(min. - after coating)  | 14.73 mm<br>14.10 mm   | 0.580 in<br>0.555 in   |
| <b>Ht</b>                  | (nom. - bare core)<br>(max. - after coating)  | 18.00 mm<br>19.00 mm   | 0.709 in<br>0.748 in   |
| <b>Mass</b>                | (approximate)   | 33 grams   |  |
| <b>Magnetic Dimensions</b> | $A_e$ - Eff. Mag. Cross Section<br>$L_e$ - Eff. Mag. Path Length<br>$V_e$ - Eff. Core Volume<br>WA - Min. Eff. Window Area<br>sa - Surface Area<br>mlt - mean length per turn   | 1.01 cm <sup>2</sup><br>6.35 cm<br>6.43 cm <sup>3</sup><br>1.56 cm <sup>2</sup><br>35.8 cm <sup>2</sup><br>5.88 cm |  |
| <b>Inductance</b>          | $\mu_i$ (reference)<br>$A_L$ value (nominal)<br>Test Winding<br>Frequency<br>Voltage on Agilent 4284A<br>AL tolerance   | 26<br>52 nH/N <sup>2</sup><br>N=80, #26 AWG<br>10 kHz<br>0.36 V<br>±8%   |  |
| <b>Core Loss</b>           | Core Loss (mW/cm <sup>3</sup> ) = $\frac{f}{a + \frac{b}{B_{pk}^3} + \frac{c}{B_{pk}^{2.3}} + \frac{d}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$<br>where $B_{pk}$ expressed in gauss, $f$ expressed in hertz, and:<br>$a=1.000E+06$ , $b=3.287E+08$ , $c=5.779E+06$ , $d=1.240E-14$<br>$B_{pk}$<br>frequency<br>Core Loss (nominal)<br>Core Loss (maximum) | 500 G<br>100 kHz<br>277 mW/cm <sup>3</sup><br>318 mW/cm <sup>3</sup>   |  |
| <b>DC Saturation</b>       | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$<br>where H expressed in oersteds, and:<br>$a=1.000E-02$ , $b=1.042E-06$ , $c=1.701$ , $d=0.000$<br>$H_{DC}$<br>Percent Initial Perm.(nom.)<br>Percent Initial Perm.(min.)  | 200 Oe<br>53.9%<br>46.1%   |  |
| <b>Coating/Pkg</b>         | Coating Type:<br>Voltage Breakdown (min.)<br>Limit<br>Package Quantity  | Blue Epoxy<br>1000 Vrms<br>0.1 mA, 5 s<br>400 Pcs/Box  |  |
| <b>Winding Table</b>       | <b>Wire Size</b>  | AWG  | 10<br>12<br>14<br>16<br>18<br>20<br>22<br>24<br>26<br>28<br>30                                       |
|                            | <b>Single Layer</b>   | Turns  | 2.500<br>2.000<br>1.600<br>1.250<br>1.000<br>0.800<br>0.630<br>0.500<br>0.400<br>0.315<br>0.250      |
|                            |   | Rdc(Ω)   | 2.3 m<br>4.9 m<br>9.7 m<br>20.1 m<br>40.6 m<br>80.2 m<br>161.7 m<br>326.4 m<br>644.9 m<br>1.3<br>2.6 |
|                            | <b>Full Winding</b>   | Turns  | 13<br>20<br>30<br>47<br>73<br>112<br>174<br>269<br>417<br>645<br>998                                 |
|                            | Rdc(Ω)  | 2.5 m<br>6.1 m<br>14.6 m<br>36.3 m<br>89.7 m<br>219.0 m<br>541.0 m<br>1.3<br>3.3<br>8.1<br>19.9                    |  |

