

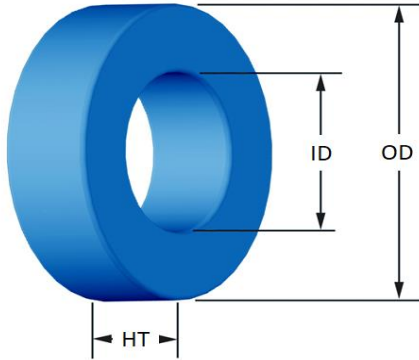


Part Number:

**GX-132060-2**

Revision:

2023-Dec-06



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

|                             |  | mm                 | in                 |
|-----------------------------|--|--------------------|--------------------|
| <b>OD</b>                   | (nom. - bare core)   | 33.02              | 1.300              |
|                             | (max.)   | 33.83              | 1.332              |
| <b>ID</b>                   | (nom. - bare core)   | 19.94              | 0.785              |
|                             | (min.)   | 19.30              | 0.760              |
| <b>HT</b>                   | (nom. - bare core)   | 11.18              | 0.440              |
|                             | (max.)   | 11.99              | 0.472              |
| <b>Mass</b>                 | (approximate)  | 43                 | grams              |
| <b>Magnetic Dimensions</b>  | $A_e$ - Eff. Mag. Cross Section  | 0.698              | cm <sup>2</sup>    |
|                             | $L_e$ - Eff. Mag. Path Length  | 8.15               | cm                 |
|                             | $V_e$ - Eff. Core Volume   | 5.69               | cm <sup>3</sup>    |
|                             | $W_A$ - Min. Eff. Window Area  | 2.93               | cm <sup>2</sup>    |
|                             | $s_a$ - Surface Area   | 40.6               | cm <sup>2</sup>    |
|                             | $m_{lt}$ - mean length per turn  | 4.82               | cm                 |
| <b>Inductance</b>           | $\mu_i$ (reference)  | 60                 |                    |
|                             | $A_L$ value (nominal)  | 65                 | nH/N <sup>2</sup>  |
|                             | Test Winding   | 70 Turns           | AWG# 22            |
|                             | Frequency  | 10k                | Hz                 |
|                             | Voltage on Agilent 4284A   | 0.22               | V                  |
| AL tolerance                | ±8%  |                    |                    |
| <b>Core Loss</b>            | $\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$ |                    |                    |
|                             | where $B_{pk}$ expressed in gauss, $f$ expressed in hertz, and:<br>$a=7.314E+06$ , $b=1.490E+09$ , $c=2.002E+06$ , $d=6.519E-15$         |                    |                    |
|                             | $B_{pk}$   | 1000               | G                  |
|                             | frequency  | 50 k               | Hz                 |
|                             | Core Loss (nominal)  | 254                | mW/cm <sup>3</sup> |
| Core Loss (maximum)         | 292  | 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>$a=1.000E-02$ , $b=3.174E-08$ , $c=2.441$ , $d=0.000$   |                    |                    |
|                             | $H_{DC}$   | 150                | Oe                 |
|                             | Percent Initial Perm.(nom.)  | 60.6               | %                  |
| Percent Initial Perm.(min.) | 49.7   | %                  |                    |
| <b>Coating/Pkg</b>          | Coating Type:  | Blue Epoxy         |                    |
|                             | Voltage Breakdown (min.)   | 1000 Vrms          |                    |
|                             | Limit  | 0.1 mA, 5 s        |                    |
|                             | Package Quantity   | 336 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 | 5.5 m  | 11.6 m | 22.8 m  | 46.3 m  | 92.9 m  | 186.0 m | 368.8 m | 734.8 m | 1.5   |
| <b>Full Winding</b>  | Turns               | 15     | 24    | 37    | 57     | 88     | 136     | 211     | 326     | 504     | 780     | 1,208   |       |
|                      | Rdc(Ω)              | 1.5 m  | 3.8 m | 9.3 m | 22.7 m | 55.7 m | 137.0 m | 338.1 m | 830.8 m | 2.0     | 5.0     | 12.4    |       |

