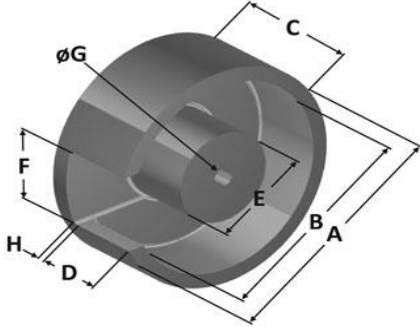




Part Number:

**PC126-402C**

Revision 2022-Mar-04 - Generated 2022-Mar-06



|                            |                                                                                                                                                    |                       |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>A</b>                   | 100.00 ± 0.30 mm                                                                                                                                   | 3.937 ± 0.012 in      |
| <b>B</b>                   | 87.00 ± 0.30 mm                                                                                                                                    | 3.425 ± 0.012 in      |
| <b>C</b>                   | 50.50 ± 0.30 mm                                                                                                                                    | 1.988 ± 0.012 in      |
| <b>D</b>                   | 41.00 ± 0.30 mm                                                                                                                                    | 1.614 ± 0.012 in      |
| <b>E</b>                   | 41.00 ± 0.30 mm                                                                                                                                    | 1.614 ± 0.012 in      |
| <b>F</b>                   | 35.00 ± 0.30 mm                                                                                                                                    | 1.378 ± 0.012 in      |
| <b>G</b>                   | 8.50 ± 0.20 mm                                                                                                                                     | 0.335 ± 0.008 in      |
| <b>H</b>                   | 1.57 Typical                                                                                                                                       | 0.062 Typical         |
| <b>Mass</b>                | (approximate)                                                                                                                                      | 970 grams/half        |
| <b>Magnetic Dimensions</b> | A <sub>e</sub> - Eff. Mag. Cross Section                                                                                                           | 15.5 cm <sup>2</sup>  |
|                            | L <sub>e</sub> - Eff. Mag. Path Length                                                                                                             | 25.7 cm               |
|                            | V <sub>e</sub> - Eff. Core Volume                                                                                                                  | 386 cm <sup>3</sup>   |
|                            | WA - Min. Eff. Window Area                                                                                                                         | 18.6 cm <sup>2</sup>  |
|                            | sa - Surface Area                                                                                                                                  | 396 cm <sup>2</sup>   |
|                            | mlt - mean length per turn                                                                                                                         | 20.1 cm               |
|                            | μ <sub>i</sub> (reference)                                                                                                                         | 10                    |
| <b>Inductance</b>          | A <sub>L</sub> value (nominal)                                                                                                                     | 95 nH/N <sup>2</sup>  |
|                            | Test Winding                                                                                                                                       | N=100, #14 AWG        |
|                            | Frequency                                                                                                                                          | 10 kHz                |
|                            | Voltage on Agilent 4284A                                                                                                                           | 5.0 V                 |
|                            | A <sub>L</sub> tolerance                                                                                                                           | ±5%                   |
| <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=4.00E+09, b=3.00E+08, c=2.70E+06, d=9.60E-16                             |                       |
|                            | B <sub>pk</sub>                                                                                                                                    | 140 G                 |
|                            | frequency                                                                                                                                          | 100 kHz               |
|                            | Core Loss (nominal)                                                                                                                                | 18 mW/cm <sup>3</sup> |
|                            | Core Loss (maximum)                                                                                                                                | 20 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=1.83E-07, c=1.46, d=0.00                                                                      |                       |
|                            | H <sub>DC</sub>                                                                                                                                    | 200 Oe                |
|                            | Percent Initial Perm(nom.)                                                                                                                         | 95.9%                 |
|                            | Percent Initial Perm(min.)                                                                                                                         | 94.8%                 |
| <b>Coating/Pkg</b>         | Coating Type:                                                                                                                                      | None                  |
|                            | Voltage Breakdown (min.)                                                                                                                           | N/A                   |
|                            | Limit                                                                                                                                              | N/A                   |
|                            | Package Quantity                                                                                                                                   | 6 Halves/Box          |

