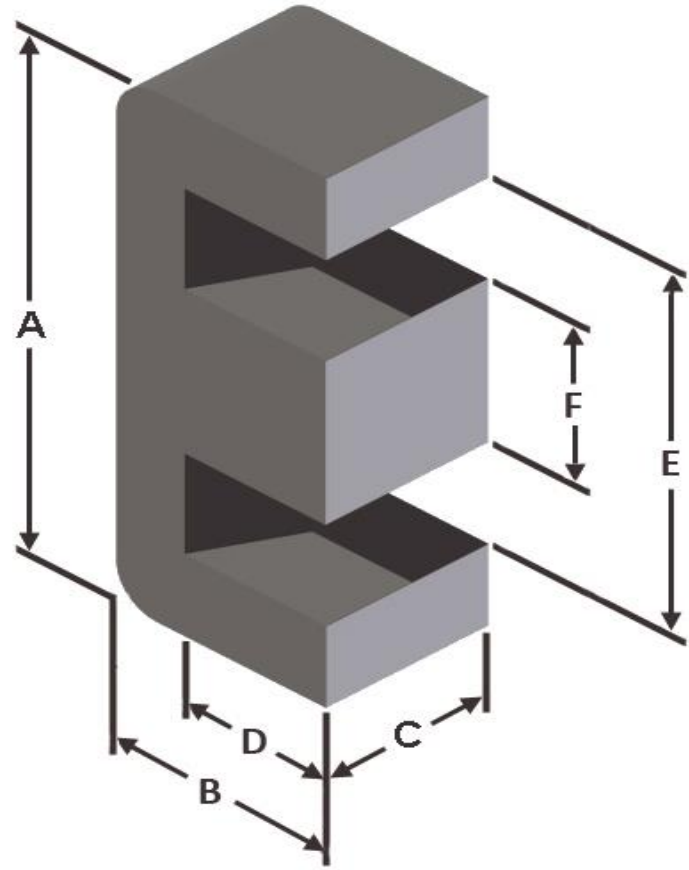




**Part Number:** EMS-0351415-060

Revision 20161027 - Generated 2016-Nov-02



|                            |  |                        |
|----------------------------|--|------------------------|
| <b>A</b>                   | 34.5 ± 0.51 mm   | 1.358 ± 0.020 in       |
| <b>B</b>                   | 14.1 ± 0.23 mm   | 0.555 ± 0.009 in       |
| <b>C</b>                   | 15 ± 0.18 mm   | 0.591 ± 0.007 in       |
| <b>D</b>                   | 9.6 mm (min.)  | 0.378 in (min.)        |
| <b>E</b>                   | 25.3 mm (min.)   | 0.996 in (min.)        |
| <b>F</b>                   | 9.3 ± 0.20 mm  | 0.366 ± 0.008 in       |
| <b>Mass</b>                | (approximate)  | 27 grams/half          |
| <b>Magnetic Dimensions</b> | A <sub>e</sub> - Eff. Mag. Cross Section   | 1.34 cm <sup>2</sup>   |
|                            | L <sub>e</sub> - Eff. Mag. Path Length   | 6.94 cm                |
|                            | V <sub>e</sub> - Eff. Core Volume  | 9.30 cm <sup>3</sup>   |
|                            | WA - Min. Eff. Window Area   | 1.52 cm <sup>2</sup>   |
|                            | sa - Surface Area  | 45.4 cm <sup>2</sup>   |
|                            | mlt - mean length per turn   | 8.06 cm                |
| <b>Inductance</b>          | μ <sub>i</sub> (reference)   | 60                     |
|                            | A <sub>L</sub> value (nominal)   | 169 nH/N <sup>2</sup>  |
|                            | Test Winding   | N=100, #20 AWG         |
|                            | Frequency  | 10 kHz                 |
|                            | Voltage on Agilent 4284A   | 0.59 V                 |
|                            | A <sub>L</sub> tolerance   | ±8%                    |
| <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=7.89E+09, b=7.11E+08, c=8.98E+06, d=2.85E-14                             |                        |
|                            | B <sub>pk</sub>  | 1000 G                 |
|                            | frequency  | 50 kHz                 |
|                            | Core Loss (nominal)  | 323 mW/cm <sup>3</sup> |
|                            | Core Loss (maximum)  | 372 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=0.01, b=4.47E-06, c=1.74, d=0.00  |                        |
|                            | H <sub>DC</sub>  | 100 Oe                 |
|                            | Percent Initial Perm(nom.)   | 42.2%                  |
| Percent Initial Perm(min.) | 34.7%  |                        |
| <b>Coating/Pkg</b>         | Coating Type:  | None                   |
|                            | Voltage Breakdown (min.)   | N/A                    |
|                            | Limit  | N/A                    |
|                            | Package Quantity   | 189 Halves/Box         |

|                      |                     |        |       |        |        |         |         |         |       |       |       |       |       |
|----------------------|---------------------|--------|-------|--------|--------|---------|---------|---------|-------|-------|-------|-------|-------|
| <b>Winding Table</b> | <b>Wire Size</b>    | AWG    | 12    | 14     | 16     | 18      | 20      | 22      | 24    | 26    | 28    | 30    | 32    |
|                      |                     | mm     | 2.000 | 1.600  | 1.250  | 1.000   | 0.800   | 0.630   | 0.500 | 0.400 | 0.315 | 0.250 | 0.200 |
|                      | <b>Full Winding</b> | Turns  | 20    | 30     | 47     | 73      | 112     | 174     | 269   | 417   | 645   | 998   | 1,545 |
|                      |                     | Rdc(Ω) | 8.4 m | 20.0 m | 49.8 m | 123.1 m | 300.3 m | 742.1 m | 1.8   | 4.5   | 11.1  | 27.2  | 67.0  |

