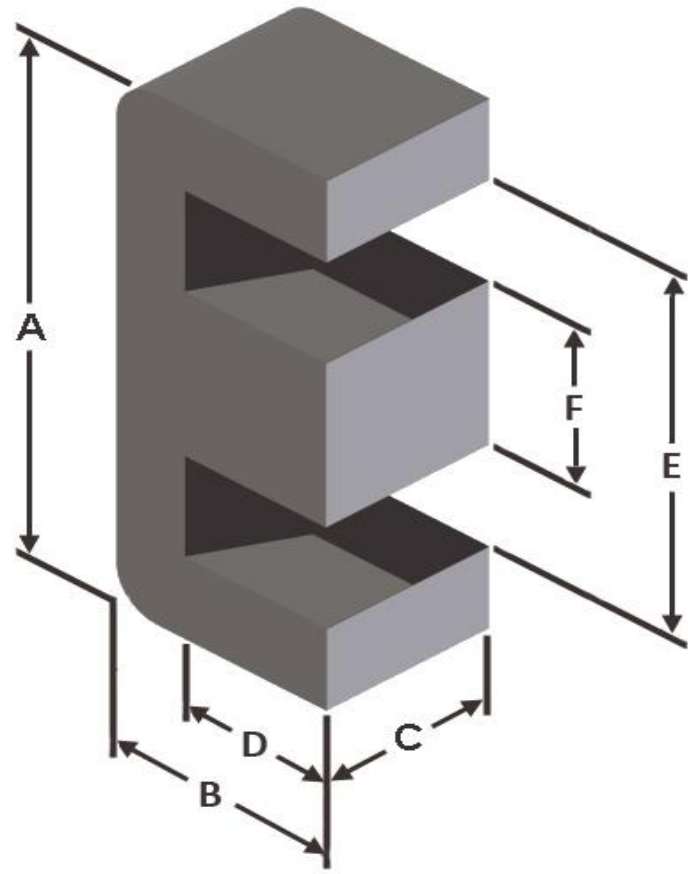




Part Number: **E220-8**
Revision 20160713 - Generated 2016-Aug-15



| | | |
|----------------------------|--|--------------------------|
| A | 56.13 ± 0.38 mm | 2.210 ± 0.015 in |
| B | 27.69 ± 0.20 mm | 1.090 ± 0.008 in |
| C | 20.83 ± 0.25 mm | 0.820 ± 0.010 in |
| D | 19.18 mm (nom.) | 0.755 in (nom.) |
| E | 38.61 mm (nom.) | 1.520 in (nom.) |
| F | 17.27 ± 0.18 mm | 0.680 ± 0.007 in |
| Mass | (approximate) | 160 grams/half |
| Magnetic Dimensions | A _e - Eff. Mag. Cross Section | 3.60 cm ² |
| | L _e - Eff. Mag. Path Length | 13.2 cm |
| | V _e - Eff. Core Volume | 47.7 cm ³ |
| | WA - Min. Eff. Window Area | 4.06 cm ² |
| | sa - Surface Area | 125 cm ² |
| | mlt - mean length per turn | 11.9 cm |
| Inductance | μ _i (reference) | 35 |
| | A _L value (nominal) | 143 nH/N ² |
| | Test Winding | N=100, #16 AWG |
| | Frequency | 10 kHz |
| | Voltage on Agilent 4284A | 1.6 V |
| A _L tolerance | ±10% | |
| Core Loss | $\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ | |
| | where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.90E+09, b=2.00E+08, c=9.00E+05, d=5.00E-15 | |
| | B _{pk} | 140 G |
| | frequency | 100 kHz |
| | Core Loss (nominal) | 32 mW/cm ³ |
| Core Loss (maximum) | 36 mW/cm ³ | |
| DC Saturation | $\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ | |
| | where H expressed in oersteds, and: a=1.00E-02, b=3.49E-06, c=1.43, d=0.00 | |
| | H _{DC} | 200 Oe |
| | Percent Initial Perm(nom.) | 60.1% |
| Percent Initial Perm(min.) | 53.7% | |
| Coating/Pkg | Coating Type: | None, Yellow/Red Stripes |
| | Voltage Breakdown (min.) | N/A |
| | Limit | N/A |
| | Package Quantity | 80 Halves/Box |

| | | | | | | | | | | | | | |
|----------------------|---------------------|-------|-------|--------|--------|--------|---------|---------|-------|-------|-------|-------|-------|
| Winding Table | Wire Size | 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 |
| | Full Winding | Turns | 22 | 34 | 52 | 81 | 126 | 194 | 301 | 465 | 720 | 1,115 | 1,726 |
| | Rdc(Ω) | | 5.4 m | 13.2 m | 32.1 m | 79.6 m | 197.0 m | 482.4 m | 1.2 | 2.9 | 7.2 | 17.7 | 43.7 |

