



**0059733A2**

110 Delta Drive  
 Pittsburgh, PA 15238  
 NAFTA Sales: (1)800-245-3984  
 HK Sales : (852)3102-9337  
 magnetics@spang.com  
 www.mag-inc.com



| Edge Permeability ( $\mu$ ) | $A_L$ (nH/T <sup>2</sup> ) | Core Marking |             |                  | Coating Color |
|-----------------------------|----------------------------|--------------|-------------|------------------|---------------|
|                             |                            | Lot Number   | Part Number | Inductance Grade |               |
| 40                          | 117 ± 8%                   | XXXXXX       | 59733A2     | N/A              | Green         |

| Dimensions | Uncoated |       | Coated Limits |       |     | Packaging                             |
|------------|----------|-------|---------------|-------|-----|---------------------------------------|
|            | (mm)     | (in)  | (mm)          | (in)  |     |                                       |
| OD (A)     | 50.55    | 1.990 | 51.51         | 2.028 | max | Cardboard cut-outs<br>Box Qty= 70 pcs |
| ID (B)     | 24.77    | 0.975 | 24.00         | 0.945 | min |                                       |
| HT (C)     | 20.83    | 0.820 | 21.59         | 0.850 | max |                                       |

| Electrical Characteristics                          |                        |     | Physical Characteristics                              |                         |   |   |                                 |  |                 |
|---|------------------------|-----|---|-------------------------|---|---|---------------------------------|--|-----------------|
| Watt Loss @ 100kHz, 100mT max (mW/cm <sup>3</sup> ) | DC Bias min (oersteds) |     | Voltage Breakdown wire to wire min (V <sub>AC</sub> ) | Break Strength min (kg) | Window Area W <sub>a</sub> (mm <sup>2</sup> ) | Cross Section A <sub>e</sub> (mm <sup>2</sup> ) | Path Length L <sub>e</sub> (mm) | Volume V <sub>e</sub> (mm <sup>3</sup> ) | Est. Weight (g) |
|   | 80%                    | 50% |   |                         |   |   |                                 |  |                 |
| 625   | 150                    | 250 | 3000  | 95.0                    | 452   | 262   | 113.5                           | 29,700                                   | 215             |

| Winding Information                    |      |                |      | Temperature Rating              |        |                   |
|--|------|----------------|------|---------------------------------|--------|-------------------|
| Winding Length Per Turn                |      |                |      | Wound Coil Dimensions (mm)      |        | Curie Temp: 500°C |
| Winding Factor                         | (mm) | Winding Factor | (mm) | 40% Winding Factor              | OD     | 56.7              |
|  |      |                |      |                                 | HT     | 29.4              |
| 0%                                     | 70.7 | 40%            | 83.2 | Completely Full Window          | Max OD | 56.7              |
| 20%                                    | 77.0 | 45%            | 85.0 |                                 | Max HT | 39.8              |
| 25%                                    | 78.5 | 50%            | 86.8 | Surface Area (mm <sup>2</sup> ) |        |                   |
| 30%                                    | 79.7 | 60%            | 90.5 | Unwound Core                    |        | 8,400             |
| 35%                                    | 81.7 | 70%            | 94.9 | 40% Winding Factor              |        | 11,000            |
| Notes:                                 |      |                |      |                                 |        |                   |
| Coating Temp (Continuous up to): 200°C |      |                |      |                                 |        |                   |

