



**0058591A2**

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



| High Flux Permeability ( $\mu$ ) | $A_L$ (nH/T <sup>2</sup> ) | Core Marking |             |                  | Coating Color |
|----------------------------------|----------------------------|--------------|-------------|------------------|---------------|
|                                  |                            | Lot Number   | Part Number | Inductance Grade |               |
| 40                               | 25 ± 8%                    | XXXXXX       | 58591A2     | N/A              | Khaki         |

| Dimensions | Uncoated |       | Coated Limits |       |     | Packaging                              |
|------------|----------|-------|---------------|-------|-----|--|
|            | (mm)     | (in)  | (mm)          | (in)  |     |  |
| OD (A)     | 34.29    | 1.350 | 35.18         | 1.385 | max | Cardboard cut-outs<br>Box Qty= 300 pcs |
| ID (B)     | 23.37    | 0.920 | 22.56         | 0.888 | min |  |
| HT (C)     | 8.89     | 0.350 | 9.78          | 0.385 | max |  |

| Electrical Characteristics                          |                        |     | Physical Characteristics                              |                         |   |   |                                 |  |            |
|---|------------------------|-----|---|-------------------------|---|---|---------------------------------|--|------------|
| Watt Loss @ 100 kHz, 50mT 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> ) | Weight (g) |
|   | 80%                    | 50% |   |                         |   |   |                                 |  |            |
| 510   | 110                    | 215 | 3000  | 54                      | 399   | 46.4  | 89.5                            | 4,150                                    | 41.98      |

| 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              |                    | Coating Temp (Continuous up to): 200°C |
|                         |      |                |      | OD                              | 40.5               | Notes:                                 |
|                         |      |                |      | HT                              | 16.8               |  |
|                         |      |                |      | Completely Full Window          |                    |  |
|                         |      |                |      | Max OD                          | 50.1               |  |
|                         |      |                |      | Max HT                          | 29.0               |  |
| 0%                      | 32.2 | 40%            | 44.0 | Surface Area (mm <sup>2</sup> ) |                    |  |
| 20%                     | 38.1 | 45%            | 45.6 | Unwound Core                    |                    |  |
| 25%                     | 39.6 | 50%            | 47.3 | 40% Winding Factor              |                    |  |
| 30%                     | 40.6 | 60%            | 50.8 |                                 |                    |  |
| 35%                     | 42.5 | 70%            | 54.9 |                                 |                    |  |

