



# C055089A2

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



| MPP Permeability ( $\mu$ ) | $A_L$ (nH/T <sup>2</sup> ) | Core Marking |             |                  | Coating Color |
|----------------------------|----------------------------|--------------|-------------|------------------|---------------|
|                            |                            | Lot Number   | Part Number | Inductance Grade |               |
| 125                        | 178 $\pm$ 8%               | XXXXXX       | 55089A2     | X                | Gray          |

| Dimensions | Uncoated |       | Coated Limits |       |     | Packaging                              |
|------------|----------|-------|---------------|-------|-----|--|
|            | (mm)     | (in)  | (mm)          | (in)  |     |  |
| OD (A)     | 46.74    | 1.840 | 47.63         | 1.875 | max | Cardboard cut-outs<br>Box Qty= 120 pcs |
| ID (B)     | 28.70    | 1.130 | 27.89         | 1.098 | min |  |
| HT (C)     | 15.24    | 0.600 | 16.13         | 0.635 | max |  |

| Electrical Characteristics                          |                        |      | Physical Characteristics                              |                         |   |   |                                 |  |            |
|---|------------------------|------|---|-------------------------|---|---|---------------------------------|--|------------|
| Watt Loss @ 100 kHz, 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> ) | Weight (g) |
|   | 850                    | 80%  |   |                         |   |   |                                 |  |            |
|   | 25.0                   | 48.5 |   |                         |   |   |                                 |  |            |

| Winding Information     |      |                |      |                                 | Temperature Rating |   |
|-------------------------|------|----------------|------|---------------------------------|--------------------|---|
| Winding Length Per Turn |      |                |      | Wound Coil Dimensions (mm)      |                    | Curie Temp: 460 °C                      |
| Winding Factor          | (mm) | Winding Factor | (mm) | 40% Winding Factor              |                    | Coating Temp (Continuous up to): 200 °C |
|                         |      |                |      | OD                              | 52.0               | Notes:                                  |
|                         |      |                |      | HT                              | 24.9               |   |
|                         |      |                |      | Max OD                          | 66.3               |   |
|                         |      |                |      | Max HT                          | 39.8               |   |
| 0%                      | 52.0 | 40%            | 66.4 | Surface Area (mm <sup>2</sup> ) |                    |   |
| 20%                     | 59.1 | 45%            | 68.2 | Unwound Core                    |                    |   |
| 25%                     | 61.0 | 50%            | 70.4 | 6,100                           |                    |   |
| 30%                     | 62.2 | 60%            | 74.7 | 40% Winding Factor              |                    |   |
| 35%                     | 64.5 | 70%            | 79.5 | 9,800                           |                    |   |

## Typical DC Bias Performance

