F-114-67

## 

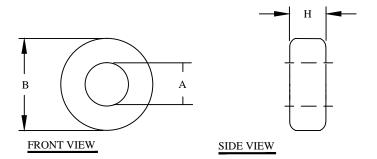
## **Features**

NiZn ferrite material with a range up to 50 MHz used for broadband transformers, antennas and HF high Q inductor applications.

Burnished to break sharp edges, can contain Parylene C coat at smaller diameters from the length of  $9.5 \mathrm{mm}$  (0.375") or a uniform coating of thermo-set plastic at larger dimensions (if part numbers ends with a C).

|   | Electr                      | ical Specifications           |                 |                |
|---|-----------------------------|-------------------------------|-----------------|----------------|
| Item                                    | Unit/Symbol                 | Condition                     | Value           | Tol.           |
| $A_L$                                   | nH/N <sup>2</sup>           | @ 10 KHz                      | 25              | + 35%,<br>-25% |
| Le                                      | cm                          | N/A                           | 7.3             | ± 10%          |
| Ae                                      | cm <sup>2</sup>             | N/A                           | 0.37            | ± 10%          |
| Ve                                      | cm <sup>3</sup>             | N/A                           | 2.700           | ± 10%          |
| Initial Permeability                    | $\mu_0$                     | @ B < 10 gauss                | 40              | + 35%,<br>-25% |
| Temp. Coeff. Of initial<br>Permeability | %, °C                       | °C 20 - 70 °C                 |                 | Тур.           |
| Coercive Force                          | Hc                          | oersted                       | 3.5             | Тур.           |
| Residual Flux Density                   | Gauss, Br                   | N/A                           | 800             | Тур.           |
| Flux Density                            | Gauss, B                    | Initial (B), oersted          | 2300            | Тур.           |
|   | Gauss, H                    | @ Field Strength (H), oersted | 20              | Тур.           |
| Curie temperature                       | °C                          | T <sub>c</sub>                | > 475           | Nom.           |
| Resistivity                             | Ω cm, ρ                     | @ Field Strength              | 10 <sup>7</sup> | Тур.           |
| Loss Factor                             | 10 <sup>-6</sup> , tanδ / μ | Initial                       | 150             | Тур.           |
|   | MHz                         | @ Frequency                   | 50              | Тур.           |

| Dimensional Tolerances |       |         |       |        |  |  |  |
|------------------------|-------|---------|-------|--------|--|--|--|
|                        | in    | tol.    | mm    | tol.   |  |  |  |
| Case                   |       |         |       |        |  |  |  |
| B (Outer Diameter)     | 1.142 | ± 0.026 | 29.00 | ± 0.65 |  |  |  |
| A (Inner Diameter)     | 0.738 | ± 0.020 | 19.00 | ± 0.50 |  |  |  |
| H (Height)             | 0.295 | ± 0.010 | 7.50  | ± 0.25 |  |  |  |
| Weight 13.00 g         |       |         |       |        |  |  |  |



## For additional detail, specifications and charts see:

http://www.bytemark.com/products/ferrite\_matl.htm

|  |            | CODE MFG. |         | 5. P/N              | DESCRIPTION                  |                           | ON         | ITEM<br>NO. |
|--|------------|-----------|---------|---------------------|------------------------------|---------------------------|------------|-------------|
|  | PARTS LIST |           |         |                     |                              |                           |            |             |
|  | AUTOCAD    |           | Х       |                     |                              | CWSBYTEMARK               |            |             |
|  | SOLID      | WORKS     |         | www.coilws.com      |                              | 353 West Grove Ave Orange |            | re CA       |
| UNLESS OTHERWISE SPECIFIED                         | s          | IGN       | DATE    | www.cwsbytemark.com |                              | 92865                     |            | 5c, ca.     |
| DIMENSIONING AND<br>TOLERANCE PER ANSI Y14.5M      | DRAWN      | EO        | 1/31/13 | TITLE:              | mita Tanai                   | d Coro                    |            |             |
| ALL DIMENSIONS ARE IN INCHES AND [MILIMETERS].     | CHECKED    | JL        | 1/31/13 | re.                 | Ferrite Toroid Core Material |                           |            |             |
| TOLERANCE INCHES:<br>.XXX=±.005 .XX=±.015 <4=±0'30 | ENGR.      | JL        | 1/31/13 | 67, NiZn            |                              |                           |            |             |
| TOLERANCE METRICS: .XXX=±.127 .XX=±.38 <=±0'30     | APPR.      | JL        | 1/31/13 | SIZE DWG. NO.       | F-1                          | 14-67                     |            | REV<br>A    |
| ANGLE PROJECTION 🔷 🚭                               | _          |           |         |                     |                              |                           |            |             |
| DO NOT SCALE DRAWING                               |            |           |         | SCALE               | N/A                          |                           | SHEET 1 OF | 1           |

EP FORMO005 REV 3 10/01 CAD-FILE: