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S-351-43-2P

## **Features**

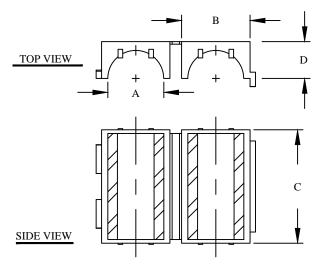
NiZn ferrite with a range of 20 to 250 MHz for suppression of conducted EMI, that is used for inductive applications (ex: high frequency common-mode chokes)

Broadband frequency range of 25-300 MHz. Suppressing frequencies up to 500 MHz. Multi-strand cable common mode filtering and single conductor differential mode filtering.

| Electrical Specifications               |                             |                               |                 |          |  |  |  |  |
|---|-----------------------------|-------------------------------|-----------------|----------|--|--|--|--|
| Item                                    | Unit/Symbol                 | Condition                     | Value           | Tol.     |  |  |  |  |
| Typical Impedance                       | Ω                           | 10 MHz                        | 75              | Тур.     |  |  |  |  |
| Typical Impedance                       | Ω                           | 25 MHz                        | 138             | 110 Min. |  |  |  |  |
| Typical Impedance                       | Ω                           | 100 MHz                       | 225             | ± 20%    |  |  |  |  |
| Typical Impedance                       | Ω                           | 250 MHz                       | 285             | Тур.     |  |  |  |  |
| Initial Permeability                    | $\mu_0$                     | $\mu_0$ @ B < 10 gauss        |                 | Nom.     |  |  |  |  |
| Temp. Coeff. Of initial<br>Permeability | %, °C                       | 20 - 70 °C                    | 1.25            | Тур.     |  |  |  |  |
| Coercive Force                          | H <sub>c</sub>              | oersted                       | 0.45            | Тур.     |  |  |  |  |
| Residual Flux Density                   | Gauss, Br                   | N/A                           | 1300            | Тур.     |  |  |  |  |
| Flux Density                            | Gauss, B                    | Initial (B), oersted          | 2900            | Тур.     |  |  |  |  |
|   | Gauss, H                    | @ Field Strength (H), oersted | 10              | Тур.     |  |  |  |  |
| Curie temperature                       | °C                          | Tc                            | > 130           | Nom.     |  |  |  |  |
| Resistivity                             | Ω cm, ρ                     | @ Field Strength              | 10 <sup>5</sup> | Тур.     |  |  |  |  |
| Loss Factor                             | 10 <sup>-6</sup> , tanδ / μ | Initial 250                   |                 | Тур.     |  |  |  |  |
|   | MHz                         | @ Frequency                   | 1               | Тур.     |  |  |  |  |

| Dimensions     |                |       |                       |              |       |     |  |  |  |
|----------------|----------------|-------|-----------------------|--------------|-------|-----|--|--|--|
|                | Cable Diameter | A     | B<br>(Core Dimension) | С            | D     | Е   |  |  |  |
| In             | 0.388          | 0.400 | 0.870                 | 1.272        | 0.433 | N/A |  |  |  |
| Tol.           | Tol. Max. Nom. |       | Nom.                  | Nom.         | Nom.  | N/A |  |  |  |
| mm             | 9.85           | 10.15 | 22.10                 | 32.30        | 11.00 | N/A |  |  |  |
| Tol.           | Tol. Max.      |       | Nom.                  | om. Nom. Nor |       | N/A |  |  |  |
| Weight 42.00 g |                |       |                       |              |       |     |  |  |  |

|         | REVISION HISTORY |                    |             |         |      |         |  |  |  |
|---------|------------------|--------------------|-------------|---------|------|---------|--|--|--|
| REV ECN | DESCRIPTION      |                    | SIGN & DATE |         |      |         |  |  |  |
|         | DESCRIPTION      | BY                 | DATE        | AP.     | DATE |         |  |  |  |
| A       |                  | Production release | ЕО          | 9/27/13 | JL   | 9/27/13 |  |  |  |
|         |                  |                    |             |         |      |         |  |  |  |



## For additional detail, specifications and charts see:

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

|  |           | CODE<br>IDENT | MFG     | 6. P/          | 'N                   |                            | DESCRIPTI   | ON        | ITEM<br>NO. |  |
|--|-----------|---------------|---------|----------------|----------------------|----------------------------|-------------|-----------|-------------|--|
|  |           |               |         |                | PARTS LIST           |                            |             |           |             |  |
|  | AUTOCAD X |               |         |                |                      |                            | CWSBYTEMARK |           | ,           |  |
|  | SOLIDY    | VORKS         |         | www.coilws.com |                      | 353 West Grove Ave. Orar   |             |           |             |  |
| UNLESS OTHERWISE SPECIFIED   | SIGN      |               | DATE    | wwv            | /w.cwsbytemark.com   |                            | 92865       |           | 150, 011.   |  |
| DIMENSIONING AND<br>TOLERANCE PER ANSI Y14.5M                              | DRAWN     | ЕО            | 9/27/13 | TITLE:         |                      |                            |             |           |             |  |
| ALL DIMENSIONS ARE IN INCHES AND [MILIMETERS].                             | CHECKED   | JL            | 9/27/13 | İ              | Ro                   | ound RF/EMI Suppression Co |             |           |             |  |
| TOLERANCE INCHES:<br>.XXX=±.005 .XX=±.015 < √=±0'30'<br>TOLERANCE METRICS: | ENGR.     | JL            | 9/27/13 |                | Dina 116             | Material 43, NiZn          |             |           |             |  |
| .XXX=±.127 .XX=±.38 <=±0'30'   | APPR.     | JL            | 9/27/13 | В              | DWG. NO. S-351-43-2P |                            |             |           | REV<br>A    |  |
| DO NOT SCALE DRAWING   |           |               |         | SCALE          |                      | N/A                        |             | SHEET 1 O | F 1         |  |
|  |           |               |         |                |                      |                            |             |           |             |  |

EP FORM0005 REV 3 10/01 CAD-FILE: