

# Ferrite EMI Beads with Axial Wire



- Differential Mode EMI Filters
- Lead Free & RoHS Compliant
- High Current
- Thru-Hole application
- Wire Leads Thru Ferrite
- Low DCR

## PART NUMBER SYSTEM EXAMPLE

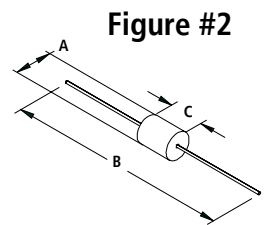
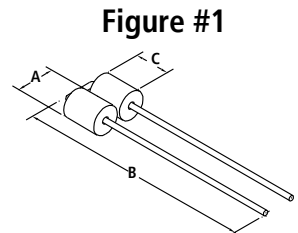
|               |              |                |                         |                        |                |                        |
|---------------|--------------|----------------|-------------------------|------------------------|----------------|------------------------|
| <u>28</u>     | <u>J</u>     | <u>0138</u>    | <u>-1</u>               | <u>1</u>               | <u>R</u>       | <u>-10</u>             |
| Material Type | Product Code | Part Size Code | Selected Dimension Code | Additional Description | Packaging Code | Additional Description |

| Part Number    | TYPICAL IMPEDANCE ( $\Omega$ ) |             |             |           | Typical Peak Impedance ( $\Omega$ ) | Typical Peak Impedance Frequency ( MHz ) | DCR MAX ( $\Omega$ ) | Rated I Max (continuous) mA |
|----------------|--------------------------------|-------------|-------------|-----------|-------------------------------------|--|----------------------|-----------------------------|
|                | Z @ 25 MHz                     | Z @ 100 MHz | Z @ 500 MHz | Z @ 1 GHz |                                     |  |                      |                             |
| 28J0138-11R-10 | 95                             | 143         | 160         | 140       | 165                                 | 300                                      | 0.01                 | 5,000                       |
| 28L0138-10R-10 | 45                             | 75          | 70          | 55        | 80                                  | 200                                      | 0.01                 | 5,000                       |
| 28L0138-40R-10 | 99                             | 135         | 180         | 80        | 138                                 | 200                                      | 0.01                 | 5,000                       |
| 28L0138-50R-10 | 92                             | 153         | 152         | 111       | 161                                 | 150                                      | 0.01                 | 5,000                       |
| 28L0138-70R-10 | 123                            | 220         | 180         | 110       | 220                                 | 100                                      | 0.01                 | 5,000                       |
| 28L0138-80R-10 | 48                             | 86          | 78          | 57        | 85                                  | 100                                      | 0.01                 | 5,000                       |

See diagram 1 on page 47 for equivalent circuit

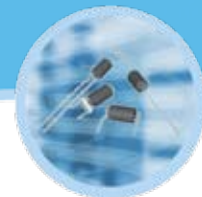
| Part Number    | Fig # | A mm (inches) | B mm (inches) | C mm (inches) |
|----------------|-------|---------------|---------------|---------------|
| 28J0138-11R-10 | 1     | 3.51 (0.138)  | 25.40 (1.000) | 4.45 (0.175)  |
| 28L0138-10R-10 | 2     | 3.51 (0.138)  | 59.00 (2.323) | 4.45 (0.175)  |
| 28L0138-40R-10 | 2     | 3.51 (0.138)  | 59.00 (2.323) | 8.89 (0.350)  |
| 28L0138-50R-10 | 2     | 3.51 (0.138)  | 59.00 (2.323) | 9.53 (0.375)  |
| 28L0138-70R-10 | 2     | 3.51 (0.138)  | 59.00 (2.323) | 13.97 (0.550) |
| 28L0138-80R-10 | 2     | 3.51 (0.138)  | 59.00 (2.323) | 5.23 (0.206)  |

Refer to part print for additional dimensions



All current ratings (I MAX) are based on continuous operation.  
Chart data can be sorted at [www.steward.com](http://www.steward.com) or [www.lairdtech.com](http://www.lairdtech.com).

# Multiple Turn Axial Wire Ferrite Beads / Cores



- Differential Mode EMI Filters
- Lead free & RoHS Compliant
- Thru-Hole Application
- Wire Wound Thru Ferrite
- Low DCR



## PART NUMBER SYSTEM EXAMPLE

|               |              |                |                         |                        |                |                        |
|---------------|--------------|----------------|-------------------------|------------------------|----------------|------------------------|
| <b>28</b>     | <b>C</b>     | <b>0236</b>    | <b>-0</b>               | <b>B</b>               | <b>S</b>       | <b>-10</b>             |
| Material Type | Product Code | Part Size Code | Selected Dimension Code | Additional Description | Packaging Code | Additional Description |

| Part Number    | TYPICAL IMPEDANCE ( $\Omega$ ) |             |             |           | Typical Peak Impedance ( $\Omega$ ) | Typical Peak Impedance Frequency ( MHz ) | DCR MAX ( $\Omega$ ) | Rated I Max (continuous) mA |
|----------------|--------------------------------|-------------|-------------|-----------|-------------------------------------|--|----------------------|-----------------------------|
|                | Z @ 25 MHz                     | Z @ 100 MHz | Z @ 500 MHz | Z @ 1 GHz |                                     |  |                      |                             |
| 28C0236-0BS-10 | 500                            | 835         | 480         | 220       | 846                                 | 156                                      | 0.01                 | 5,000                       |
| 28C0236-0BW-10 | 500                            | 835         | 480         | 220       | 846                                 | 156                                      | 0.01                 | 5,000                       |
| 28C0236-0DW-10 | 260                            | 460         | 478         | 360       | 498                                 | 300                                      | 0.01                 | 5,000                       |
| 28C0236-0EW-10 | 620                            | 998         | 484         | 205       | 1010                                | 140                                      | 0.01                 | 5,000                       |
| 28C0236-0JW-10 | 620                            | 998         | 484         | 205       | 1010                                | 140                                      | 0.01                 | 5,000                       |

| Part Number    | Fig # | A mm (inches) | B mm (inches) | C mm (inches) | D mm (inches) | E mm (inches) | F mm (inches) | L1 mm (inches) |
|----------------|-------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| 28C0236-0BS-10 | 1     | 6.00 (0.236)  | 14.99 (0.590) | 10.00 (0.394) | 0.51 (0.020)  | 14.61 (0.575) | -             | 5.99 (0.236)   |
| 28C0236-0BW-10 | 2     | 6.00 (0.236)  | 86.46 (3.404) | 10.00 (0.394) | 0.51 (0.020)  | 14.61 (0.575) | -             | 38.10 (1.500)  |
| 28C0236-0DW-10 | 3     | 6.00 (0.236)  | 86.46 (3.404) | 10.00 (0.394) | 0.51 (0.020)  | 14.61 (0.575) | -             | 38.23 (1.505)  |
| 28C0236-0EW-10 | 4     | 6.00 (0.236)  | 50.53 (1.989) | 10.00 (0.394) | 0.51 (0.020)  | 14.61 (0.575) | -             | 38.10 (1.500)  |
| 28C0236-0JW-10 | 5     | 6.00 (0.236)  | 20.96 (0.825) | 10.00 (0.394) | 0.51 (0.020)  | 15.90 (0.626) | 5.08 (0.200)  | 5.08 (0.200)   |

See diagram 1 on page 47 for equivalent circuit

Figure #1

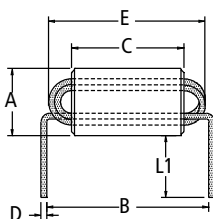


Figure #2

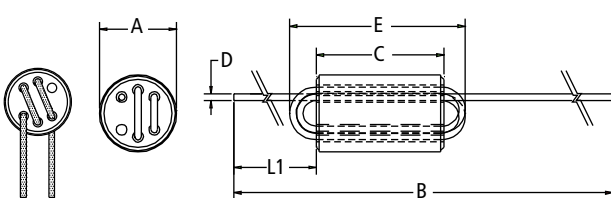


Figure #3

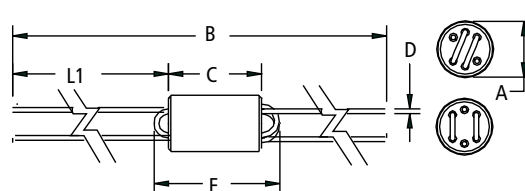


Figure #4

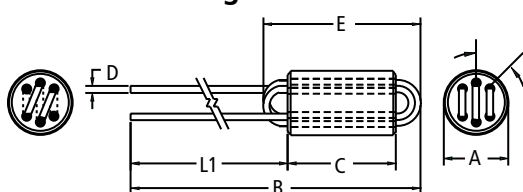


Figure #5

