

## Type 3615 Series

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This is a high current, wound inductor, based on phenolic, iron or ferrite cores (depending on the value required). The terminations are of solder coated copper. Values from 0.1 $\mu$ H to 2.7 $\mu$ H have a phenolic core, 3.3 $\mu$ H to 100 $\mu$ H an iron core and 120  $\mu$ H to 1000  $\mu$ H a ferrite core.

We can also offer custom design solutions in the 3615 package. Please enquire.

### Key Features

- High Current Winding
- Versatile Size - 11.4mm x 5mm
- Temperature Range -55°C to +100°C
- Supplied in Standard Carrier Tape
- Suitable for Dip and Wave Solder
- Insulation 1000 M Ohms Minimum
- Available from Stock

### Characteristics - Electrical Style

| Core     | Body Marking | Inductance ( $\mu$ H) $\pm 10\%$ | Q Min | Test Freq. (MHz) | Self Resonant Freq. (MHz) | DC Resistance @ 20°C (Max Ohms) | Direct Current @ 70°C (Max mA) |
|----------|--------------|----------------------------------|-------|------------------|---------------------------|---------------------------------|--------------------------------|
| Phenolic | uH10-K       | 0.10                             | 50    | 25               | 550                       | 0.027                           | 3500                           |
|          | uH12-K       | 0.12                             | 50    | 25               | 550                       | 0.028                           | 2870                           |
|          | uH15-K       | 0.15                             | 50    | 25               | 510                       | 0.030                           | 2770                           |
|          | uH18-K       | 0.18                             | 50    | 25               | 460                       | 0.033                           | 2640                           |
|          | uH22-K       | 0.22                             | 50    | 25               | 415                       | 0.035                           | 2570                           |
|          | uH27-K       | 0.27                             | 50    | 25               | 380                       | 0.043                           | 2310                           |
|          | uH33-K       | 0.33                             | 50    | 25               | 350                       | 0.050                           | 2150                           |
|          | uH39-K       | 0.39                             | 50    | 25               | 320                       | 0.065                           | 1880                           |
|          | uH47-K       | 0.47                             | 50    | 25               | 300                       | 0.080                           | 1700                           |
|          | uH56-K       | 0.56                             | 50    | 25               | 270                       | 0.10                            | 1520                           |
|          | uH68-K       | 0.68                             | 50    | 25               | 250                       | 0.12                            | 1385                           |
|          | uH82-K       | 0.82                             | 50    | 25               | 220                       | 0.18                            | 1130                           |
|          | 1uH0-K       | 1.0                              | 50    | 25               | 200                       | 0.25                            | 960                            |
|          | 1uH2-K       | 1.2                              | 35    | 7.9              | 180                       | 0.40                            | 760                            |
|          | 1uH5-K       | 1.5                              | 35    | 7.9              | 170                       | 0.48                            | 690                            |
|          | 1uH8-K       | 1.8                              | 35    | 7.9              | 150                       | 0.74                            | 555                            |
|          | 2uH2-K       | 2.2                              | 35    | 7.9              | 140                       | 0.90                            | 505                            |
|          | 2uH7-K       | 2.7                              | 35    | 7.9              | 120                       | 1.10                            | 455                            |
|          | 3uH3-K       | 3.3                              | 35    | 7.9              | 70                        | 0.14                            | 1280                           |
|          | 3uH9-K       | 3.9                              | 35    | 7.9              | 65                        | 0.16                            | 1200                           |
| Iron     | 4uH7-K       | 4.7                              | 35    | 7.9              | 60                        | 0.21                            | 1050                           |
|          | 5uH6-K       | 5.6                              | 35    | 7.9              | 50                        | 0.28                            | 905                            |
|          | 6uH8-K       | 6.8                              | 35    | 7.9              | 50                        | 0.37                            | 785                            |
|          | 8uH2-K       | 8.2                              | 35    | 7.9              | 48                        | 0.40                            | 760                            |
|          | 10uH-K       | 10                               | 35    | 7.9              | 42                        | 0.60                            | 620                            |
|          | 12uH-K       | 12                               | 50    | 2.5              | 35                        | 0.85                            | 520                            |
|          | 15uH-K       | 15                               | 55    | 2.5              | 30                        | 1.2                             | 438                            |
|          | 18uH-K       | 18                               | 55    | 2.5              | 30                        | 1.8                             | 358                            |
|          | 22uH-K       | 22                               | 55    | 2.5              | 24                        | 2.0                             | 340                            |
|          | 27uH-K       | 27                               | 55    | 2.5              | 22                        | 2.7                             | 290                            |
|          | 33uH-K       | 33                               | 55    | 2.5              | 20                        | 3.4                             | 259                            |
|          | 39uH-K       | 39                               | 55    | 2.5              | 18                        | 3.8                             | 245                            |
|          | 47uH-K       | 47                               | 55    | 2.5              | 16                        | 3.4                             | 259                            |
|          | 56uH-K       | 56                               | 55    | 2.5              | 15                        | 3.7                             | 249                            |
|          | 68uH-K       | 68                               | 55    | 2.5              | 13                        | 4.0                             | 239                            |
|          | 82uH-K       | 82                               | 55    | 2.5              | 10                        | 4.4                             | 228                            |
| Ferrite  | mH10-K       | 100                              | 55    | 2.5              | 8.0                       | 4.9                             | 216                            |
|          | mH12-K       | 120                              | 60    | 0.79             | 6.8                       | 5.6                             | 202                            |
|          | mH15-K       | 150                              | 60    | 0.79             | 6.4                       | 6.2                             | 192                            |
|          | mH18-K       | 180                              | 60    | 0.79             | 6.0                       | 6.9                             | 182                            |
|          | mH22-K       | 220                              | 60    | 0.79             | 5.8                       | 7.5                             | 175                            |
|          | mH27-K       | 270                              | 60    | 0.79             | 5.6                       | 8.2                             | 167                            |
|          | mH33-K       | 330                              | 60    | 0.79             | 5.0                       | 9.1                             | 159                            |
|          | mH39-K       | 390                              | 60    | 0.79             | 4.5                       | 10.0                            | 151                            |
|          | mH47-K       | 470                              | 60    | 0.79             | 4.0                       | 11.0                            | 144                            |
|          | mH56-K       | 560                              | 60    | 0.79             | 3.6                       | 12.3                            | 136                            |
|          | mH68-K       | 680                              | 60    | 0.79             | 3.4                       | 13.7                            | 129                            |
|          | mH82-K       | 820                              | 60    | 0.79             | 3.1                       | 15.1                            | 123                            |
|          | 1mH0-K       | 1000                             | 60    | 0.79             | 2.5                       | 16.5                            | 118                            |

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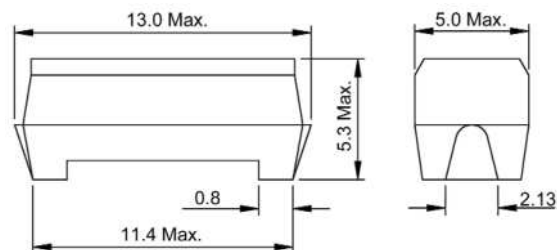
### Characteristics - Electrical

|                                    |                   |
|------------------------------------|-------------------|
| Operating Temperature:             | -55°C to +100°C   |
| Temperature Rise:                  | 30°C maximum      |
| Power Dissipation at 70°C ambient: | 0.3 Watts         |
| Environmental classification:      | 55/100/56         |
| Weight:                            | 0.7 grams maximum |

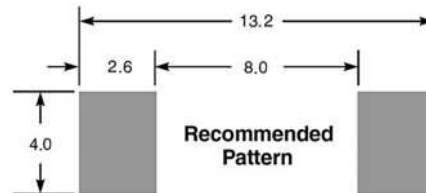
### Packaging

Parts are supplied Taped and Reeled on 13" Reels in quantities of 1500 pieces

### Dimensions



### Pad Layout



### How to Order

| 3615        | A                 | 1R5                     | K              |
|-------------|-------------------|-------------------------|----------------|
| Common Part | Style             | Inductance              | Tolerance      |
| 3615        | A - Standard Part | Value Code<br>See Table | K - $\pm 10\%$ |