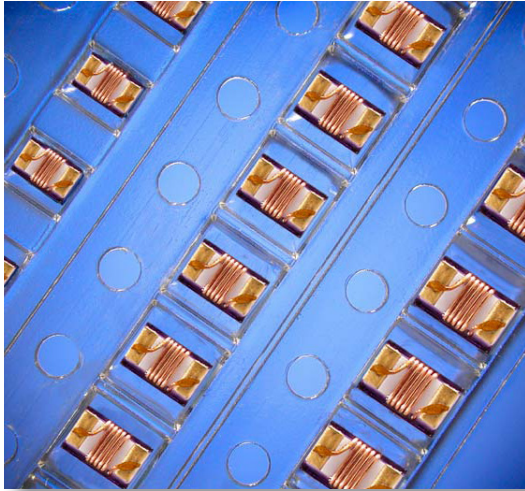


# RF WIREWOUND CHIP INDUCTORS



These high frequency High-Q chip inductors feature a monolithic body made of low loss ceramic wound with wire to achieve optimal high frequency performance.

These RF chip inductors are compact in size and are provided on tape and reel packaging which makes them ideal for high volume RF applications. They feature a nickel barrier with a top plating of gold for the ceramic core types (all 0402, all 0603, and most 0805 types), and with a top plating of 100% tin for the ferrite core types (0805 size, 470 nH and higher). Most inductance values between those listed are available on request.

## APPLICATIONS

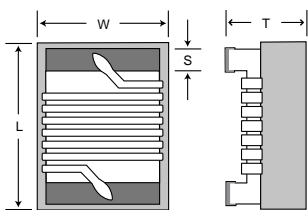
- CELL/PCS Modules
- Wireless LAN
- Broadband Components
- RFID
- RF Transceivers
- Cordless Phone
- Cable Modem
- Computer Peripherals
- Bluetooth
- ASDL

## PRODUCT RANGE SUMMARY

| EIA SIZE (mm) | SIZE CODE | L RANGE         | Q FACTOR (Typ.) | SRF (Typ.)       | TEMPERATURE       |
|---------------|-----------|-----------------|-----------------|------------------|-------------------|
| 0402 (1005)   | L-07      | 1.0 - 120 nH    | 55 (900 MHz)    | >11 GHz (1.0 nH) | -40°C to + 125°C  |
| 0603 (1608)   | L-14      | 2.0 - 470 nH    | 60 (900 MHz)    | >13 GHz (2.0 nH) | -40°C to + 125°C  |
| 0805 (2012)   | L-15      | 2.2 - 10,000 nH | 60 (500 MHz)    | >11 GHz (2.2 nH) | -40°C to + 125°C* |

\*-40 deg. C to +85 deg. C for ferrite core types

## MECHANICAL CHARACTERISTICS



|           | 0402 (1005) |             | 0603 (1608) |             | 0805 (2012) |             |
|-----------|-------------|-------------|-------------|-------------|-------------|-------------|
|           | Inches      | mm          | Inches      | mm          | Inches      | mm          |
| Length    | .039 ±.004" | (1.00 ±.10) | .063 ±.008" | (1.60 ±.20) | .079 ±.008" | (2.00 ±.20) |
| Width     | .022 ±.004" | (0.55 ±.10) | .041 ±.008" | (1.05 ±.20) | .049 ±.008" | (1.25 ±.20) |
| Thickness | .020 ±.004" | (0.50 ±.10) | .041 ±.008" | (1.05 ±.20) | .047 ±.008" | (1.20 ±.20) |
| End Band  | .008 ±.004" | (0.20 ±.10) | .014 ±.004" | (0.35 ±.10) | .016 ±.004" | (0.40 ±.10) |

## HOW TO ORDER

| L-       | 07                                  | W  | 4N3       | S   | V  | 4              | T   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
|----------|-------------------------------------|--|-----------|---|--|----------------|---|------|------|------|------|-----|------|---|-------|----|--------|------|---|----------|----|-------|------|---|----------|----|-------|------|------|-----|---|
| DEVICE   | SIZE                                | TYPE   | VALUE     | TOLERANCE*  | TERMINATION  | MARKING        | PACKAGING   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
| Inductor | 07 = 0402<br>14 = 0603<br>15 = 0805 | W = Wirewound on Ceramic Core<br>F = Wirewound on Ferrite Core | See Table | C = ± 0.2 nH<br>S = ± 0.3 nH<br>G = ± 2%<br>J = ± 5%<br>K = ± 10% | V = Ni / Au for "W" types,<br>and V = Ni / 100% Sn for "F" types | 4 = No Marking | Tape and Reel<br><table border="1"> <thead> <tr> <th>Size</th> <th>Code</th> <th>Tape</th> <th>Reel</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>0402</td> <td>T</td> <td>Paper</td> <td>7"</td> <td>10,000</td> </tr> <tr> <td>0603</td> <td>E</td> <td>Embossed</td> <td>7"</td> <td>3,000</td> </tr> <tr> <td>0805</td> <td>E</td> <td>Embossed</td> <td>7"</td> <td>2,000</td> </tr> </tbody> </table><br>Bulk (Loose Pcs.)<br><table border="1"> <thead> <tr> <th>Size</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>S</td> </tr> </tbody> </table> | Size | Code | Tape | Reel | Qty | 0402 | T | Paper | 7" | 10,000 | 0603 | E | Embossed | 7" | 3,000 | 0805 | E | Embossed | 7" | 2,000 | Size | Code | All | S |
| Size     | Code                                | Tape   | Reel      | Qty   |  |                |   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
| 0402     | T                                   | Paper  | 7"        | 10,000  |  |                |   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
| 0603     | E                                   | Embossed   | 7"        | 3,000   |  |                |   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
| 0805     | E                                   | Embossed   | 7"        | 2,000   |  |                |   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
| Size     | Code                                |  |           |   |  |                |   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |
| All      | S                                   |  |           |   |  |                |   |      |      |      |      |     |      |   |       |    |        |      |   |          |    |       |      |   |          |    |       |      |      |     |   |

Example Part Number:

**L-07W4N3SV4T** is: 0402 Wirewound, 4.3 nanohenry, +/- 0.3 nH tolerance, Ni / Au termination, No Marking, Paper tape on a 7" reel.

## RF WIREWOUND CHIP INDUCTOR SELECTION CHART

| EIA Size       |               | 0402<br>(L-07) |               | 0603<br>(L-14) |               | 0805<br>(L-15) |               | Core Type               |
|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|-------------------------|
| Inductor Value | Inductance nH | Tolerance      | Rated Current | Tolerance      | Rated Current | Tolerance      | Rated Current |                         |
| 1.0            | 1N0           | C, S           | 1360 mA       |                |               |                |               | CERAMIC CORE ("V" Type) |
| 1.2            | 1N2           | C, S           | 1300 mA       |                |               |                |               |                         |
| 1.6            | 1N6           |                |               | C, S           | 700 mA        |                |               |                         |
| 1.8            | 1N8           | C, S           | 1040 mA       | C, S           | 700 mA        |                |               |                         |
| 1.9            | 1N9           | C, S           | 1040 mA       |                |               |                |               |                         |
| 2.0            | 2N0           | C, S           | 1040 mA       | C, S           | 700 mA        |                |               |                         |
| 2.2            | 2N2           | C, S           | 960 mA        |                |               | C, S           | 800 mA        |                         |
| 2.4            | 2N4           | C, S           | 790 mA        |                |               |                |               |                         |
| 2.6            | 2N6           | C, S           | 640 mA        |                |               |                |               |                         |
| 2.7            | 2N7           | C, S           | 640 mA        |                |               | C, S           | 800 mA        |                         |
| 3.3            | 3N3           | C, J, K        | 840 mA        | C, S           | 700 mA        | C, S           | 800 mA        |                         |
| 3.6            | 3N6           | C, J, K        | 840 mA        | C, S           | 700 mA        |                |               |                         |
| 3.9            | 3N9           | C, J, K        | 840 mA        | C, S           | 700 mA        | C, S           | 600 mA        |                         |
| 4.3            | 4N3           | C, J, K        | 700 mA        | C, S           | 700 mA        |                |               |                         |
| 4.7            | 4N7           | C, J, K        | 640 mA        | C, S           | 700 mA        | C, S           | 600 mA        |                         |
| 5.1            | 5N1           | C, J, K        | 800 mA        | C, J, K        | 700 mA        |                |               |                         |
| 5.6            | 5N6           | C, J, K        | 760 mA        | C, J, K        | 700 mA        | C, J, K        | 600 mA        |                         |
| 6.2            | 6N2           | C, J, K        | 760 mA        |                |               |                |               |                         |
| 6.8            | 6N8           | C, J, K        | 680 mA        | C, J, K        | 700 mA        | C, G, J, K     | 600 mA        |                         |
| 7.5            | 7N5           | C, J, K        | 680 mA        | C, J, K        | 700 mA        | J, K           | 600 mA        |                         |
| 8.2            | 8N2           | C, J, K        | 680 mA        | C, J, K        | 700 mA        | C, G, J, K     | 600 mA        |                         |
| 8.7            | 8N7           | C, J, K        | 480 mA        | C, J, K        | 700 mA        |                |               |                         |
| 9.0            | 9N0           | C, J, K        | 680 mA        |                |               |                |               |                         |
| 9.5            | 9N5           | C, J, K        | 680 mA        | C, J, K        | 700 mA        |                |               |                         |
| 10             | 10N           | G, J, K        | 480 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 11             | 11N           | G, J, K        | 640 mA        | G, J, K        | 700 mA        |                |               |                         |
| 12             | 12N           | G, J, K        | 640 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 13             | 13N           | G, J, K        | 560 mA        |                |               | J, K           | 600 mA        |                         |
| 15             | 15N           | G, J, K        | 560 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 16             | 16N           | G, J, K        | 560 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 18             | 18N           | G, J, K        | 420 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 19             | 19N           | G, J, K        | 480 mA        |                |               |                |               |                         |
| 20             | 20N           | G, J, K        | 420 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 22             | 22N           | G, J, K        | 400 mA        | G, J, K        | 700 mA        | G, J, K        | 600 mA        |                         |
| 23             | 23N           | G, J, K        | 400 mA        | G, J, K        | 700 mA        |                |               |                         |
| 24             | 24N           | G, J, K        | 400 mA        | G, J, K        | 700 mA        | J, K           | 600 mA        |                         |
| 27             | 27N           | G, J, K        | 400 mA        | G, J, K        | 600 mA        | G, J, K        | 600 mA        |                         |
| 30             | 30N           | G, J, K        | 400 mA        | G, J, K        | 700 mA        |                |               |                         |
| 33             | 33N           | G, J, K        | 400 mA        | G, J, K        | 600 mA        | G, J, K        | 500 mA        |                         |
| 36             | 36N           | G, J, K        | 320 mA        |                |               | J, K           | 600 mA        |                         |
| 39             | 39N           | G, J, K        | 320 mA        | G, J, K        | 600 mA        | G, J, K        | 500 mA        |                         |
| 40             | 40N           | G, J, K        | 320 mA        |                |               |                |               |                         |
| 43             | 43N           | G, J, K        | 100 mA        | G, J, K        | 700 mA        | J, K           | 600 mA        |                         |
| 47             | 47N           | G, J, K        | 100 mA        | G, J, K        | 600 mA        | G, J, K        | 500 mA        |                         |
| 51             | 51N           | J, K           | 100 mA        | G, J, K        | 600 mA        | J, K           | 600 mA        |                         |
| 56             | 56N           | J, K           | 100 mA        | G, J, K        | 600 mA        | G, J, K        | 500 mA        |                         |
| 68             | 68N           | J, K           | 100 mA        | G, J, K        | 600 mA        | G, J, K        | 500 mA        |                         |
| 72             | 72N           |                |               | G, J, K        | 400 mA        |                |               |                         |
| 82             | 82N           | J, K           | 100 mA        | G, J, K        | 400 mA        | G, J, K        | 500 mA        |                         |
| 100            | R10           | J, K           | 100 mA        | G, J, K        | 400 mA        | G, J, K        | 500 mA        |                         |
| 110            | R11           | J, K           | 100 mA        |                |               |                |               |                         |
| 120            | R12           | J, K           | 100 mA        | G, J, K        | 300 mA        | G, J, K        | 500 mA        |                         |
| 150            | R15           |                |               | G, J, K        | 280 mA        | G, J, K        | 400 mA        |                         |
| 180            | R18           |                |               | G, J, K        | 240 mA        | G, J, K        | 400 mA        |                         |
| 220            | R22           |                |               | G, J, K        | 200 mA        | G, J, K        | 400 mA        |                         |
| 270            | R27           |                |               | G, J, K        | 170 mA        | G, J, K        | 350 mA        |                         |

| EIA Size       |               | 0402<br>(L-07) |               | 0603<br>(L-14) |               | 0805<br>(L-15) |               | Core Type               |
|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|-------------------------|
| Inductor Value | Inductance nH | Tolerance      | Rated Current | Tolerance      | Rated Current | Tolerance      | Rated Current |                         |
| 330            | R33           |                |               | J, K           | 150 mA        | G, J, K        | 300 mA        | Ceramic                 |
| 390            | R39           |                |               | J, K           | 100 mA        | G, J, K        | 210 mA        |                         |
| 470            | R47           |                |               | J, K           | 100 mA        | J, K           | 500 mA        | FERRITE CORE ("F" Type) |
| 560            | R56           |                |               |                |               | J, K           | 450 mA        |                         |
| 680            | R68           |                |               |                |               | J, K           | 400 mA        |                         |
| 820            | R82           |                |               |                |               | J, K           | 300 mA        |                         |
| 1000           | 1R0           |                |               |                |               | J, K           | 180 mA        |                         |
| 1200           | 1R2           |                |               |                |               | J, K           | 150 mA        |                         |
| 1500           | 1R5           |                |               |                |               | J, K           | 130 mA        |                         |
| 1800           | 1R8           |                |               |                |               | J, K           | 120 mA        |                         |
| 2200           | 2R2           |                |               |                |               | J, K           | 110 mA        |                         |
| 2700           | 2R7           |                |               |                |               | J, K           | 100 mA        |                         |
| 3300           | 3R3           |                |               |                |               | J, K           | 210 mA        |                         |
| 3900           | 3R9           |                |               |                |               | J, K           | 200 mA        |                         |
| 4700           | 4R7           |                |               |                |               | J, K           | 180 mA        |                         |
| 5600           | 5R6           |                |               |                |               | J, K           | 160 mA        |                         |
| 6800           | 6R8           |                |               |                |               | J, K           | 130 mA        |                         |
| 8200           | 8R2           |                |               |                |               | J, K           | 120 mA        |                         |
| 10000          | 10R           |                |               |                |               | J, K           | 80 mA         |                         |

Consult factory for Non-Standard values.

See web page for WireWound Inductor Product Detail Summary by part number

Q vs Frequency for 0402 Size



L vs Frequency for 0402 Size



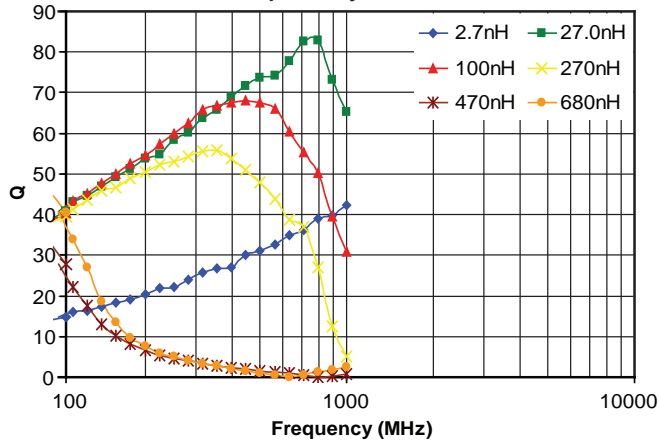
Q vs Frequency for 0603 Size



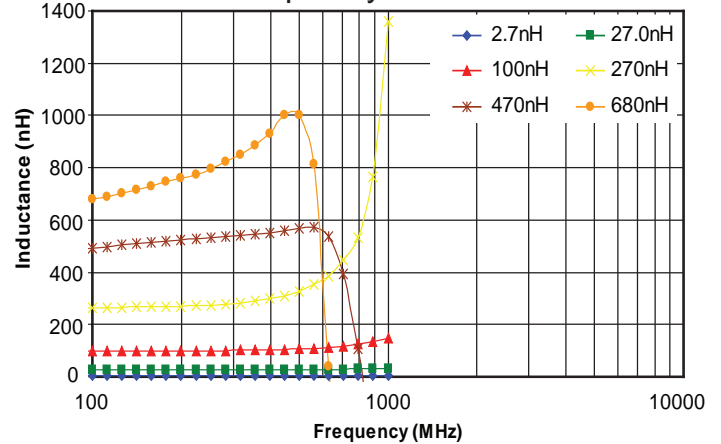
L vs Frequency for 0603 Size



Q vs Frequency for 0805 Size



L vs Frequency for 0805 Size



## 0402 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

| Part Number<br>(Standard Tol.) | Inductance<br>@ 250MHz | Available Tolerances<br>@ 250MHz | Q (min.)<br>@ 250MHz | Q (Typ.)<br>@ 900MHz | Q (Typ.)<br>@ 1.8GHz | SRF<br>(min.) | DC Resistance<br>(max.) | Rated Current<br>(max.) |
|--------------------------------|------------------------|----------------------------------|----------------------|----------------------|----------------------|---------------|-------------------------|-------------------------|
| L-07W1N0SV4T                   | 1.0 nH                 | ±0.2 nH, ±0.3 nH                 | 13                   | 49                   | 60                   | 6.0 GHz       | 0.045 Ω                 | 1360 mA                 |
| L-07W1N2SV4T                   | 1.2 nH                 | ±0.2 nH, ±0.3 nH                 | 13                   | 49                   | 60                   | 6.0 GHz       | 0.060 Ω                 | 1300 mA                 |
| L-07W1N8SV4T                   | 1.8 nH                 | ±0.2 nH, ±0.3 nH                 | 16                   | 50                   | 60                   | 6.0 GHz       | 0.070 Ω                 | 1040 mA                 |
| L-07W1N9SV4T                   | 1.9 nH                 | ±0.2 nH, ±0.3 nH                 | 16                   | 50                   | 60                   | 6.0 GHz       | 0.070 Ω                 | 1040 mA                 |
| L-07W2N0SV4T                   | 2.0 nH                 | ±0.2 nH, ±0.3 nH                 | 16                   | 51                   | 62                   | 6.0 GHz       | 0.070 Ω                 | 1040 mA                 |
| L-07W2N2SV4T                   | 2.2 nH                 | ±0.2 nH, ±0.3 nH                 | 18                   | 52                   | 65                   | 6.0 GHz       | 0.070 Ω                 | 960 mA                  |
| L-07W2N4SV4T                   | 2.4 nH                 | ±0.2 nH, ±0.3 nH                 | 15                   | 52                   | 65                   | 6.0 GHz       | 0.068 Ω                 | 790 mA                  |
| L-07W2N7SV4T                   | 2.7 nH                 | ±0.2 nH, ±0.3 nH                 | 16                   | 50                   | 65                   | 6.0 GHz       | 0.120 Ω                 | 640 mA                  |
| L-07W3N3JV4T                   | 3.3 nH                 | ±0.2 nH, ±5%, ±10%               | 19                   | 53                   | 72                   | 6.0 GHz       | 0.066 Ω                 | 840 mA                  |
| L-07W3N6JV4T                   | 3.6 nH                 | ±0.2 nH, ±5%, ±10%               | 19                   | 55                   | 72                   | 6.0 GHz       | 0.066 Ω                 | 840 mA                  |
| L-07W3N9JV4T                   | 3.9 nH                 | ±0.2 nH, ±5%, ±10%               | 19                   | 60                   | 76                   | 5.8 GHz       | 0.066 Ω                 | 840 mA                  |
| L-07W4N3JV4T                   | 4.3 nH                 | ±0.2 nH, ±5%, ±10%               | 18                   | 55                   | 82                   | 6.0 GHz       | 0.091 Ω                 | 700 mA                  |
| L-07W4N7JV4T                   | 4.7 nH                 | ±0.2 nH, ±5%, ±10%               | 15                   | 55                   | 82                   | 4.8 GHz       | 0.130 Ω                 | 640 mA                  |
| L-07W5N1JV4T                   | 5.1 nH                 | ±0.2 nH, ±5%, ±10%               | 20                   | 58                   | 83                   | 5.8 GHz       | 0.083 Ω                 | 800 mA                  |
| L-07W5N6JV4T                   | 5.6 nH                 | ±0.2 nH, ±5%, ±10%               | 20                   | 61                   | 89                   | 5.8 GHz       | 0.083 Ω                 | 760 mA                  |
| L-07W6N2JV4T                   | 6.2 nH                 | ±0.2 nH, ±5%, ±10%               | 20                   | 57                   | 80                   | 5.8 GHz       | 0.083 Ω                 | 760 mA                  |
| L-07W6N8JV4T                   | 6.8 nH                 | ±0.2 nH, ±5%, ±10%               | 20                   | 58                   | 80                   | 4.8 GHz       | 0.083 Ω                 | 680 mA                  |
| L-07W7N5JV4T                   | 7.5 nH                 | ±0.2 nH, ±5%, ±10%               | 22                   | 59                   | 90                   | 5.8 GHz       | 0.104 Ω                 | 680 mA                  |
| L-07W8N2JV4T                   | 8.2 nH                 | ±0.2 nH, ±5%, ±10%               | 22                   | 60                   | 87                   | 4.4 GHz       | 0.104 Ω                 | 680 mA                  |
| L-07W8N7JV4T                   | 8.7 nH                 | ±0.2 nH, ±5%, ±10%               | 18                   | 60                   | 83                   | 4.1 GHz       | 0.200 Ω                 | 480 mA                  |
| L-07W9N0JV4T                   | 9.0 nH                 | ±0.2 nH, ±5%, ±10%               | 22                   | 60                   | 83                   | 4.2 GHz       | 0.104 Ω                 | 680 mA                  |
| L-07W9N5JV4T                   | 9.5 nH                 | ±0.2 nH, ±5%, ±10%               | 18                   | 55                   | 76                   | 4.0 GHz       | 0.200 Ω                 | 680 mA                  |
| L-07W10NJV4T                   | 10.0 nH                | ±2%, ±5%, ±10%                   | 21                   | 56                   | 76                   | 3.9 GHz       | 0.195 Ω                 | 480 mA                  |
| L-07W11NJV4T                   | 11.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 61                   | 86                   | 3.7 GHz       | 0.120 Ω                 | 640 mA                  |
| L-07W12NJV4T                   | 12.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 58                   | 77                   | 3.6 GHz       | 0.120 Ω                 | 640 mA                  |
| L-07W13NJV4T                   | 13.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 60                   | 77                   | 3.5 GHz       | 0.210 Ω                 | 560 mA                  |
| L-07W15NJV4T                   | 15.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 61                   | 86                   | 3.3 GHz       | 0.172 Ω                 | 560 mA                  |
| L-07W16NJV4T                   | 16.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 58                   | 77                   | 3.1 GHz       | 0.220 Ω                 | 560 mA                  |
| L-07W18NJV4T                   | 18.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 58                   | 77                   | 3.1 GHz       | 0.230 Ω                 | 420 mA                  |
| L-07W19NJV4T                   | 19.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 58                   | 77                   | 3.0 GHz       | 0.202 Ω                 | 480 mA                  |
| L-07W20NJV4T                   | 20.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 54                   | 74                   | 3.0 GHz       | 0.250 Ω                 | 420 mA                  |
| L-07W22NJV4T                   | 22.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 54                   | 73                   | 2.7 GHz       | 0.300 Ω                 | 400 mA                  |
| L-07W23NJV4T                   | 23.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 55                   | 73                   | 2.7 GHz       | 0.214 Ω                 | 400 mA                  |
| L-07W24NJV4T                   | 24.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 54                   | 74                   | 2.7 GHz       | 0.300 Ω                 | 400 mA                  |
| L-07W27NJV4T                   | 27.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 55                   | 75                   | 2.5 GHz       | 0.298 Ω                 | 400 mA                  |
| L-07W30NJV4T                   | 30.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 52                   | 64                   | 2.3 GHz       | 0.300 Ω                 | 400 mA                  |
| L-07W33NJV4T                   | 33.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 52                   | 64                   | 2.3 GHz       | 0.350 Ω                 | 400 mA                  |
| L-07W36NJV4T                   | 36.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 52                   | 64                   | 2.3 GHz       | 0.403 Ω                 | 320 mA                  |
| L-07W39NJV4T                   | 39.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 51                   | 48                   | 2.1 GHz       | 0.550 Ω                 | 320 mA                  |
| L-07W40NJV4T                   | 40.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 51                   | 48                   | 2.3 GHz       | 0.438 Ω                 | 320 mA                  |
| L-07W43NJV4T                   | 43.0 nH                | ±2%, ±5%, ±10%                   | 24                   | 50                   | 46                   | 2.0 GHz       | 0.810 Ω                 | 100 mA                  |
| L-07W47NJV4T                   | 47.0 nH                | ±2%, ±5%, ±10%                   | 22@200MHz            | 50                   | 46                   | 2.1 GHz       | 0.830 Ω                 | 100 mA                  |
| L-07W51NJV4T                   | 51.0 nH                | +/-5%, +/-10%                    | 22@200MHz            | 49                   | N/A                  | 1.7 GHz       | 0.820 Ω                 | 100 mA                  |
| L-07W56NJV4T                   | 56.0 nH                | +/-5%, +/-10%                    | 22@200MHz            | 49                   | N/A                  | 1.7 GHz       | 0.970 Ω                 | 100 mA                  |
| L-07W68NJV4T                   | 68.0 nH                | +/-5%, +/-10%                    | 22@200MHz            | 42                   | N/A                  | 1.6 GHz       | 1.120 Ω                 | 100 mA                  |



## 0402 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

| Part Number<br>(Standard Tol.) | Inductance<br>@ 250MHz | Available Tolerances<br>@ 250MHz | Q (min.)<br>@ 250MHz | Q (Typ.)<br>@ 900MHz | Q (Typ.)<br>@ 1.8GHz | SRF<br>(min.) | DC Resistance<br>(max.) | Rated Current<br>(max.) |
|--------------------------------|------------------------|----------------------------------|----------------------|----------------------|----------------------|---------------|-------------------------|-------------------------|
| L-07W82NJV4T                   | 82.0 nH                | +/-5%, +/-10%                    | 16@150 MHz           | 39                   | N/A                  | 1.5 GHz       | 1.250 $\Omega$          | 100 mA                  |
| L-07WR10JV4T                   | 100.0 nH               | +/-5%, +/-10%                    | 16@150 MHz           | 36                   | N/A                  | 1.3 GHz       | 2.520 $\Omega$          | 100 mA                  |
| L-07WR11JV4T                   | 110.0 nH               | +/-5%, +/-10%                    | 14@150 MHz           | 35                   | N/A                  | 1.2 GHz       | 2.660 $\Omega$          | 100 mA                  |
| L-07WR12JV4T                   | 120.0 nH               | +/-5%, +/-10%                    | 14@150 MHz           | 35                   | N/A                  | 1.1 GHz       | 2.660 $\Omega$          | 100 mA                  |

## 0603 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

| Part Number<br>(Standard Tol.) | Inductance<br>@ L/Q Freq. | L/Q Test<br>Freq. | Available Tolerances<br>@ L/Q Freq.  | Q (min.)<br>@ L/Q Freq. | SRF (min.) | DC Resistance<br>(max.) | Rated Current<br>(max.) |
|--------------------------------|---------------------------|-------------------|--------------------------------------|-------------------------|------------|-------------------------|-------------------------|
| L-14W1N6SV4E                   | 1.6 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 14                      | 7.0 GHz    | 0.080 $\Omega$          | 700 mA                  |
| L-14W1N8SV4E                   | 1.8 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 16                      | 6.9 GHz    | 0.080 $\Omega$          | 700 mA                  |
| L-14W2N0SV4E                   | 2.0 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 16                      | 6.9 GHz    | 0.080 $\Omega$          | 700 mA                  |
| L-14W3N3SV4E                   | 3.3 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 17                      | 6.1 GHz    | 0.080 $\Omega$          | 700 mA                  |
| L-14W3N6SV4E                   | 3.6 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 20                      | 6.0 GHz    | 0.080 $\Omega$          | 700 mA                  |
| L-14W3N9SV4E                   | 3.9 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 22                      | 5.9 GHz    | 0.080 $\Omega$          | 700 mA                  |
| L-14W4N3SV4E                   | 4.3 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 22                      | 5.8 GHz    | 0.060 $\Omega$          | 700 mA                  |
| L-14W4N7SV4E                   | 4.7 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 0.3$ nH           | 20                      | 5.8 GHz    | 0.110 $\Omega$          | 700 mA                  |
| L-14W5N1JV4E                   | 5.1 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 5\%$ , $\pm 10\%$ | 18                      | 5.4 GHz    | 0.110 $\Omega$          | 700 mA                  |
| L-14W5N6JV4E                   | 5.6 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 5\%$ , $\pm 10\%$ | 16                      | 5.0 GHz    | 0.110 $\Omega$          | 700 mA                  |
| L-14W6N8JV4E                   | 6.8 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 5\%$ , $\pm 10\%$ | 30                      | 4.6 GHz    | 0.110 $\Omega$          | 700 mA                  |
| L-14W7R5JV4E                   | 7.5 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 5\%$ , $\pm 10\%$ | 30                      | 4.7 GHz    | 0.110 $\Omega$          | 700 mA                  |
| L-14W8N2JV4E                   | 8.2 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 5\%$ , $\pm 10\%$ | 30                      | 4.8 GHz    | 0.100 $\Omega$          | 700 mA                  |
| L-14W8N7JV4E                   | 8.7 nH                    | 250 MHz           | $\pm 0.2$ nH, $\pm 5\%$ , $\pm 10\%$ | 30                      | 4.6 GHz    | 0.120 $\Omega$          | 700 mA                  |
| L-14W10NJV4E                   | 10.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 31                      | 4.0 GHz    | 0.130 $\Omega$          | 700 mA                  |
| L-14W11NJV4E                   | 11.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 33                      | 4.0 GHz    | 0.086 $\Omega$          | 700 mA                  |
| L-14W12NJV4E                   | 12.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 4.0 GHz    | 0.130 $\Omega$          | 700 mA                  |
| L-14W15NJV4E                   | 15.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 3.1 GHz    | 0.170 $\Omega$          | 700 mA                  |
| L-14W18NJV4E                   | 18.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 38                      | 3.0 GHz    | 0.170 $\Omega$          | 700 mA                  |
| L-14W22NJV4E                   | 22.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 38                      | 3.0 GHz    | 0.220 $\Omega$          | 700 mA                  |
| L-14W27NJV4E                   | 27.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 40                      | 2.8 GHz    | 0.220 $\Omega$          | 600 mA                  |
| L-14W33NJV4E                   | 33.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 43                      | 2.3 GHz    | 0.220 $\Omega$          | 600 mA                  |
| L-14W39NJV4E                   | 39.0 nH                   | 250 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 43                      | 2.2 GHz    | 0.250 $\Omega$          | 600 mA                  |
| L-14W47NJV4E                   | 47.0 nH                   | 200 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 40                      | 2.0 GHz    | 0.280 $\Omega$          | 600 mA                  |
| L-14W51NJV4E                   | 51.0 nH                   | 200 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 40                      | 1.9 GHz    | 0.300 $\Omega$          | 600 mA                  |
| L-14W56NJV4E                   | 56.0 nH                   | 200 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 40                      | 1.9 GHz    | 0.310 $\Omega$          | 600 mA                  |
| L-14W68NJV4E                   | 68.0 nH                   | 200 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 40                      | 1.7 GHz    | 0.340 $\Omega$          | 600 mA                  |
| L-14W72NJV4E                   | 72.0 nH                   | 150 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 1.7 GHz    | 0.490 $\Omega$          | 400 mA                  |
| L-14W82NJV4E                   | 82.0 nH                   | 150 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 1.7 GHz    | 0.540 $\Omega$          | 400 mA                  |
| L-14WR10JV4E                   | 100.0 nH                  | 150 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 1.4 GHz    | 0.630 $\Omega$          | 400 mA                  |
| L-14WR12JV4E                   | 120.0 nH                  | 150 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 1.3 GHz    | 0.650 $\Omega$          | 300 mA                  |
| L-14WR15JV4E                   | 150.0 nH                  | 150.0 nH          | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 35                      | 1.0 GHz    | 0.920 $\Omega$          | 280 mA                  |
| L-14WR18JV4E                   | 180.0 nH                  | 100 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 30                      | 1.0 GHz    | 1.25 $\Omega$           | 240 mA                  |
| L-14WR22JV4E                   | 220.0 nH                  | 100 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 30                      | 1.0 GHz    | 1.70 $\Omega$           | 200 mA                  |
| L-14WR27JV4E                   | 270.0 nH                  | 100 MHz           | $\pm 2\%$ , $\pm 5\%$ , $\pm 10\%$   | 30                      | 1.0 GHz    | 1.80 $\Omega$           | 170 mA                  |
| L-14WR33JV4E                   | 330.0 nH                  | 100 MHz           | $\pm 5\%$ , $\pm 10\%$               | 25                      | 900 MHz    | 3.60 $\Omega$           | 150 mA                  |
| L-14WR39JV4E                   | 390.0 nH                  | 100 MHz           | $\pm 5\%$ , $\pm 10\%$               | 24                      | 750 MHz    | 5.30 $\Omega$           | 100 mA                  |
| L-14WR47JV4E                   | 470.0 nH                  | 100 MHz           | $\pm 5\%$ , $\pm 10\%$               | 23                      | 700 MHz    | 5.60 $\Omega$           | 100 mA                  |