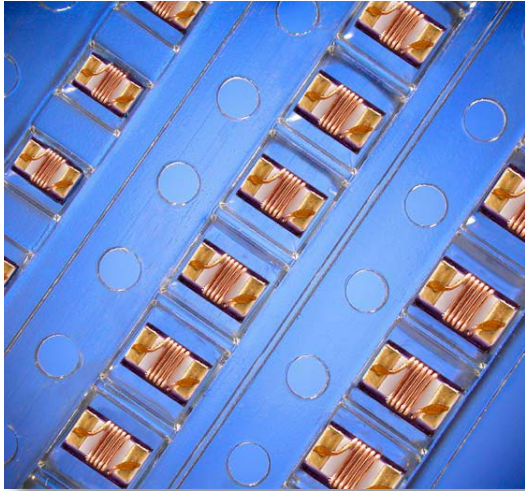


# RF WIREWOUND CHIP INDUCTORS



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

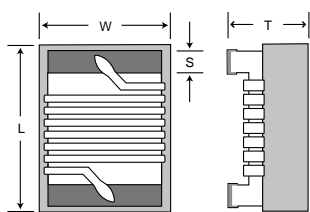
- CELL/PCS Modules
- Wireless LAN
- Broadband Components
- RFID
- RF Transceivers
- Cordless Phone
- Cable Modem
- Computer Peripherals
- Bluetooth
- ASDL

## 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" style="font-size: small;"> <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" style="font-size: small;"> <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 (L-07) |               | 0603 (L-14) |               | 0805 (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 (L-07) |               | 0603 (L-14) |               | 0805 (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



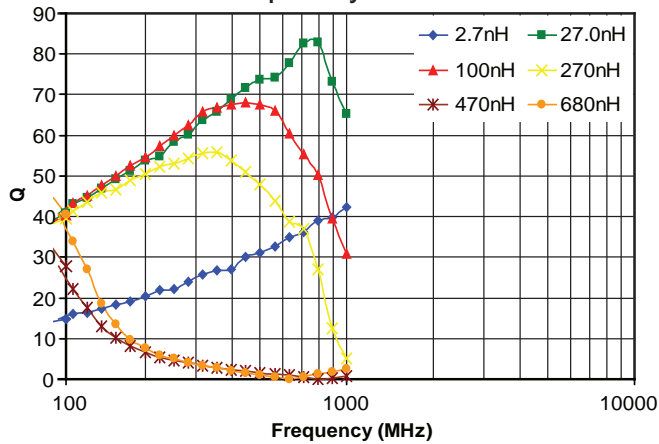
Q vs Frequency for 0603 Size



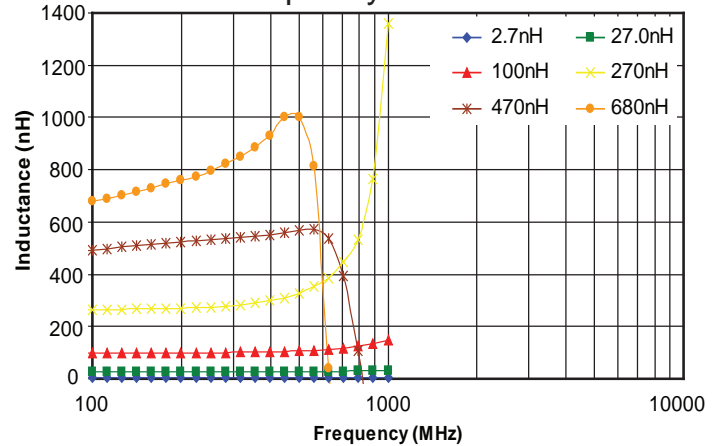
L vs Frequency for 0603 Size



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                  |

## 0805 INDUCTANCE RANGE / ELECTRICAL CHARACTERISTICS

| Part Number<br>(Standard Tol.) | Inductance<br>@ L Test<br>Freq. | L Test<br>Freq. | Available Tolerances<br>@ L Test Freq. | Q (min.)<br>@ Q Test Freq. | Q Test<br>Freq. | SRF (min.) | DC Resistance<br>(max.) | Rated Current<br>(max.) |
|--------------------------------|---------------------------------|-----------------|--|----------------------------|-----------------|------------|-------------------------|-------------------------|
| L-15W2N2SV4E                   | 2.2 nH                          | 250 MHz         | ±0.2 nH, ±0.3 nH                       | 50                         | 1000 MHz        | >6000 MHz  | 0.06 Ω                  | 800 mA                  |
| L-15W2N7SV4E                   | 2.7 nH                          | 250 MHz         | ±0.2 nH, ±0.3 nH                       | 30                         | 1000 MHz        | >6000 MHz  | 0.08 Ω                  | 800 mA                  |
| L-15W3N3SV4E                   | 3.3 nH                          | 250 MHz         | ±0.2 nH, ±0.3 nH                       | 60                         | 1000 MHz        | >6000 MHz  | 0.08 Ω                  | 800 mA                  |
| L-15W3N9SV4E                   | 3.9 nH                          | 250 MHz         | ±0.2 nH, ±0.3 nH                       | 60                         | 1000 MHz        | >6000 MHz  | 0.06 Ω                  | 600 mA                  |
| L-15W4N7SV4E                   | 4.7 nH                          | 250 MHz         | ±0.2 nH, ±0.3 nH                       | 60                         | 1000 MHz        | 5800 MHz   | 0.06 Ω                  | 600 mA                  |
| L-15W5N6SV4E                   | 5.6 nH                          | 250 MHz         | ±0.2 nH, ±5%, ±10%                     | 60                         | 1000 MHz        | 5800 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W6N8SV4E                   | 6.8 nH                          | 250 MHz         | ±0.2 nH, ±5%, ±10%                     | 60                         | 1000 MHz        | 5500 MHz   | 0.06 Ω                  | 600 mA                  |
| L-15W8N2SV4E                   | 8.2 nH                          | 250 MHz         | ±0.2 nH, ±5%, ±10%                     | 60                         | 1000 MHz        | 5500 MHzzz | 0.06 Ω                  | 600 mA                  |
| L-15W10NJV4E                   | 10.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 4800 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W12NJV4E                   | 12.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 4100 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W15NJV4E                   | 15.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 3600 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W16NJV4E                   | 16.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 3500 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W18NJV4E                   | 18.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 3400 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W20NJV4E                   | 20.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 3400 MHz   | 0.08 Ω                  | 600 mA                  |
| L-15W22NJV4E                   | 22.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 3300 MHz   | 0.10 Ω                  | 600 mA                  |
| L-15W27NJV4E                   | 27.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 2600 MHz   | 0.12 Ω                  | 600 mA                  |
| L-15W33NJV4E                   | 33.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 2400 MHz   | 0.15 Ω                  | 500 mA                  |
| L-15W39NJV4E                   | 39.0 nH                         | 250 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 2100 MHz   | 0.18 Ω                  | 500 mA                  |
| L-15W47NJV4E                   | 47.0 nH                         | 200 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 1700 MHz   | 0.15 Ω                  | 500 mA                  |
| L-15W56NJV4E                   | 56.0 nH                         | 200 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 1600 MHz   | 0.25 Ω                  | 500 mA                  |
| L-15W68NJV4E                   | 68.0 nH                         | 150 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 1450 MHz   | 0.27 Ω                  | 500 mA                  |
| L-15W82NJV4E                   | 82.0 nH                         | 150 MHz         | ±2%, ±5%, ±10%                         | 60                         | 500 MHz         | 1350 MHz   | 0.32 Ω                  | 500 mA                  |
| L-15WR10JV4E                   | 100 nH                          | 100 MHz         | ±2%, ±5%, ±10%                         | 57                         | 250 MHz         | 1200 MHz   | 0.43 Ω                  | 500 mA                  |
| L-15WR12JV4E                   | 120 nH                          | 100 MHz         | ±2%, ±5%, ±10%                         | 50                         | 250 MHz         | 1100 MHz   | 0.48 Ω                  | 500 mA                  |
| L-15WR15JV4E                   | 150 nH                          | 100 MHz         | ±2%, ±5%, ±10%                         | 50                         | 250 MHz         | 950 MHz    | 0.56 Ω                  | 400 mA                  |
| L-15WR18JV4E                   | 180 nH                          | 100 MHz         | ±2%, ±5%, ±10%                         | 50                         | 250 MHz         | 900 MHz    | 0.78 Ω                  | 400 mA                  |
| L-15WR22JV4E                   | 220 nH                          | 100 MHz         | ±2%, ±5%, ±10%                         | 50                         | 250 MHz         | 860 MHz    | 1.00 Ω                  | 400 mA                  |
| L-15WR27JV4E                   | 270 nH                          | 100 MHz         | ±2%, ±5%, ±10%                         | 45                         | 250 MHz         | 850 MHz    | 1.46 Ω                  | 350 mA                  |
| L-15WR33JV4E                   | 330 nH                          | 25 MHz          | ±2%, ±5%, ±10%                         | 45                         | 250 MHz         | 800 MHz    | 1.65 Ω                  | 300 mA                  |
| L-15WR39JV4E                   | 390 nH                          | 25 MHz          | ±2%, ±5%, ±10%                         | 45                         | 250 MHz         | 780 MHz    | 2.20 Ω                  | 210 mA                  |
| L-15FR47JV4E                   | 470 nH                          | 25 MHz          | ±5%, ±10%                              | 45                         | 100 MHz         | 375 MHz    | 0.95 Ω                  | 500 mA                  |
| L-15FR56JV4E                   | 560 nH                          | 25 MHz          | ±5%, ±10%                              | 45                         | 100 MHz         | 340 MHz    | 1.10 Ω                  | 450 mA                  |
| L-15FR68JV4E                   | 680 nH                          | 25 MHz          | ±5%, ±10%                              | 35                         | 100 MHz         | 188 MHz    | 1.20 Ω                  | 400 mA                  |
| L-15FR82JV4E                   | 820 nH                          | 8 MHz           | ±5%, ±10%                              | 35                         | 100 MHz         | 210 MHz    | 1.50 Ω                  | 300 mA                  |
| L-15F1R0JV4E                   | 1000 nH                         | 8 MHz           | ±5%, ±10%                              | 35                         | 50 MHz          | 200 MHz    | 2.13 Ω                  | 180 mA                  |
| L-15F1R2JV4E                   | 1200 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 200 MHz    | 2.38 Ω                  | 150 mA                  |
| L-15F1R5JV4E                   | 1500 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 200 MHz    | 2.90 Ω                  | 130 mA                  |
| L-15F1R8JV4E                   | 1800 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 120 MHz    | 3.00 Ω                  | 120 mA                  |
| L-15F2R2JV4E                   | 2200 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 110 MHz    | 3.10 Ω                  | 110 mA                  |
| L-15F2R7JV4E                   | 2700 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 100 MHz    | 3.50 Ω                  | 100 mA                  |
| L-15F3R3JV4E                   | 3300 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 70 MHz     | 2.30 Ω                  | 210 mA                  |
| L-15F3R9JV4E                   | 3900 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 60 MHz     | 2.50 Ω                  | 200 mA                  |
| L-15F4R7JV4E                   | 4700 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 50 MHz     | 2.80 Ω                  | 180 mA                  |
| L-15F5R6JV4E                   | 5600 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 45 MHz     | 3.00 Ω                  | 160 mA                  |
| L-15F6R8JV4E                   | 6800 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 45 MHz     | 3.20 Ω                  | 130 mA                  |
| L-15F8R2JV4E                   | 8200 nH                         | 8 MHz           | ±5%, ±10%                              | 15                         | 8 MHz           | 40 MHz     | 3.50 Ω                  | 120 mA                  |
| L-15F10RJV4E                   | 10000 nH                        | 8 MHz           | ±5%, ±10%                              | 10                         | 8 MHz           | 40 MHz     | 5.00 Ω                  | 80 mA                   |