

### 1. High Frequency Use (Non Magnetic Core) RF, ND, NC, NA

Japan  
China



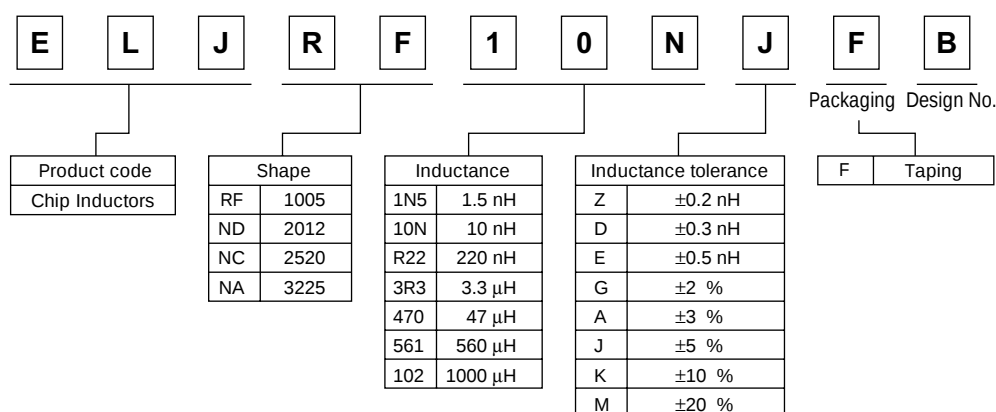
#### ■ Features

- High Freq. use chip inductor using non magnetic core.
- Correspond to Re-flowsoldering and flow soldering.
- Wide line-up from 1005 size to 3225 size.
- Good for mounting.

#### ■ Recommended Applications

- RF circuit for cellular phone and wireless communication equipment.

#### ■ Explanation of Part Numbers



#### ■ Storage condition

- Package : Normal temperature (−5 to 35 °C), normal humidity (85 %RH Max.), shall not be exposed to direct sunlight and harmful gas and care should be taken so as not to cause dew.
- Product on PWB: Temperature −20 to +85 °C

#### ■ Storage period

- In generally, even if storage condition is good, solderability will be down cause of time progress.  
Please use product within 6 months after received.  
(In case of over 6 months storage period, use the product after confirmation of no abnormality of appearance and solderability.)

■ Packaging Refer 28 ro 29 page.

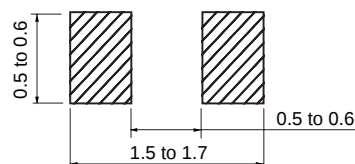
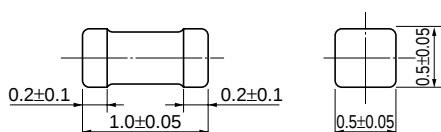
■ Soldering condition Refer 30 page.

■ Caution for use Refer 31 page.

### ■ RF Type 1005 (0402)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 10000 pcs./Reel

### ■ Standard Parts (E12 series)

| Part No.    | Inductance |               |                     | Q    |                     | SRF *1<br>(MHz) min. | R <sub>DC</sub> *2<br>(Ω) max. | DC Current<br>(mA) max. |
|-------------|------------|---------------|---------------------|------|---------------------|----------------------|--------------------------------|-------------------------|
|             | (nH)       | Tolerance (%) | Test Freq.<br>(MHz) | min. | Test Freq.<br>(MHz) |                      |                                |                         |
| ELJRF1N0□FB | 1.0        | D : ±0.3 nH   | 100                 | 8    | 100                 | 6000                 | 0.05                           | 400                     |
| ELJRF1N2□FB | 1.2        |               |                     |      |                     | 6000                 | 0.06                           | 400                     |
| ELJRF1N5□FB | 1.5        |               |                     |      |                     | 6000                 | 0.07                           | 400                     |
| ELJRF1N8□FB | 1.8        |               |                     |      |                     | 6000                 | 0.08                           | 400                     |
| ELJRF2N2□FB | 2.2        |               |                     |      |                     | 6000                 | 0.09                           | 400                     |
| ELJRF2N7□FB | 2.7        |               |                     |      |                     | 5500                 | 0.10                           | 400                     |
| ELJRF3N3□FB | 3.3        |               |                     |      |                     | 5500                 | 0.12                           | 400                     |
| ELJRF3N9□FB | 3.9        |               |                     |      |                     | 5200                 | 0.15                           | 360                     |
| ELJRF4N7□FB | 4.7        |               |                     |      |                     | 4800                 | 0.17                           | 360                     |
| ELJRF5N6□FB | 5.6        |               |                     |      |                     | 4600                 | 0.19                           | 340                     |
| ELJRF6N8□FB | 6.8        | J : ±5 %      | 100                 | 8    | 100                 | 4000                 | 0.30                           | 320                     |
| ELJRF8N2□FB | 8.2        |               |                     |      |                     | 3500                 | 0.35                           | 320                     |
| ELJRF10N□FB | 10         |               |                     |      |                     | 2800                 | 0.41                           | 320                     |
| ELJRF12N□FB | 12         |               |                     |      |                     | 2800                 | 0.45                           | 320                     |
| ELJRF15N□FB | 15         |               |                     |      |                     | 2500                 | 0.60                           | 240                     |
| ELJRF18N□FB | 18         |               |                     |      |                     | 2200                 | 0.70                           | 240                     |
| ELJRF22N□FB | 22         |               |                     |      |                     | 2000                 | 0.80                           | 200                     |
| ELJRF27N□FB | 27         |               |                     |      |                     | 1800                 | 1.20                           | 200                     |
| ELJRF33N□FB | 33         |               |                     |      |                     | 1800                 | 1.40                           | 170                     |
| ELJRF39N□FB | 39         |               |                     |      |                     | 1800                 | 1.70                           | 150                     |
| ELJRF47N□FB | 47         |               |                     |      |                     | 1800                 | 2.10                           | 140                     |
| ELJRF56N□FB | 56         |               |                     |      |                     | 1500                 | 2.50                           | 130                     |
| ELJRF68N□FB | 68         |               |                     |      |                     | 1500                 | 4.00                           | 120                     |
| ELJRF82N□FB | 82         |               |                     |      |                     | 1400                 | 4.50                           | 110                     |
| ELJRFR10□FB | 100        |               |                     |      |                     | 1200                 | 5.50                           | 90                      |

□ : Symbol of Tolerance \*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ Standard Parts (E24 series)

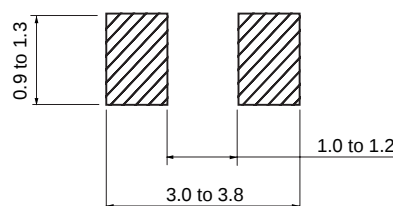
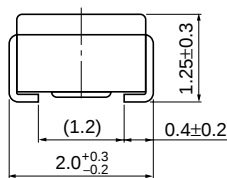
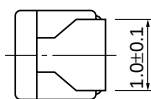
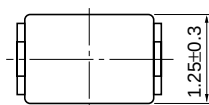
| Part No.    | Inductance |               |                     | Q    |                     | SRF *1<br>(MHz) min. | R <sub>DC</sub> *2<br>(Ω) max. | DC Current<br>(mA) max. |
|-------------|------------|---------------|---------------------|------|---------------------|----------------------|--------------------------------|-------------------------|
|             | (nH)       | Tolerance (%) | Test Freq.<br>(MHz) | min. | Test Freq.<br>(MHz) |                      |                                |                         |
| ELJRF2N0□FB | 2.0        | D : ±0.3 nH   | 100                 | 8    | 100                 | 6000                 | 0.08                           | 400                     |
| ELJRF2N4□FB | 2.4        |               |                     |      |                     | 6000                 | 0.09                           | 400                     |
| ELJRF3N0□FB | 3.0        |               |                     |      |                     | 5500                 | 0.11                           | 400                     |
| ELJRF3N6□FB | 3.6        |               |                     |      |                     | 5300                 | 0.14                           | 380                     |
| ELJRF4N3□FB | 4.3        |               |                     |      |                     | 5000                 | 0.16                           | 360                     |
| ELJRF5N1□FB | 5.1        |               |                     |      |                     | 4700                 | 0.18                           | 350                     |
| ELJRF6N2□FB | 6.2        | J : ±5 %      | 100                 | 8    | 100                 | 4300                 | 0.25                           | 330                     |
| ELJRF7N5□FB | 7.5        |               |                     |      |                     | 3700                 | 0.33                           | 320                     |
| ELJRF9N1□FB | 9.1        |               |                     |      |                     | 3100                 | 0.38                           | 320                     |
| ELJRF11N□FB | 11         |               |                     |      |                     | 2800                 | 0.43                           | 320                     |
| ELJRF13N□FB | 13         |               |                     |      |                     | 2600                 | 0.53                           | 280                     |
| ELJRF16N□FB | 16         |               |                     |      |                     | 2300                 | 0.65                           | 240                     |
| ELJRF20N□FB | 20         |               |                     |      |                     | 2100                 | 0.75                           | 220                     |
| ELJRF24N□FB | 24         |               |                     |      |                     | 1900                 | 1.00                           | 200                     |
| ELJRF30N□FB | 30         |               |                     |      |                     | 1800                 | 1.30                           | 190                     |
| ELJRF36N□FB | 36         |               |                     |      |                     | 1800                 | 1.60                           | 160                     |
| ELJRF43N□FB | 43         |               |                     |      |                     | 1800                 | 1.90                           | 150                     |

□ : Symbol of Tolerance \*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ ND Type 2012 (0805)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 3000 pcs./Reel

### ■ Standard Parts

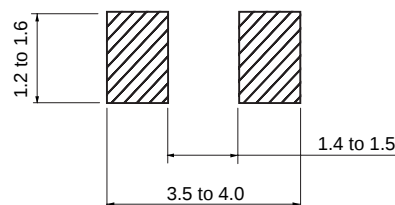
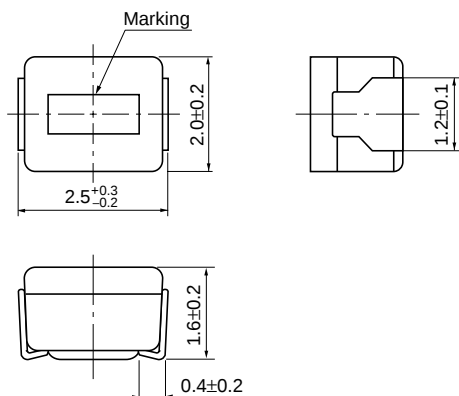
| Part No.   | Inductance |                              |                     | Q    |                     | SRF *1<br>(MHz) min. | R <sub>DC</sub> *2<br>(Ω) max. | DC Current<br>(mA) max. |
|------------|------------|------------------------------|---------------------|------|---------------------|----------------------|--------------------------------|-------------------------|
|            | (nH)       | Tolerance<br>(%)             | Test Freq.<br>(MHz) | min. | Test Freq.<br>(MHz) |                      |                                |                         |
| ELJND10N□F | 10         | K : ±10 %                    | 100                 | 10   | 100                 | 3300                 | 0.18                           | 540                     |
| ELJND12N□F | 12         |                              |                     |      |                     | 3300                 | 0.24                           | 535                     |
| ELJND15N□F | 15         |                              |                     | 12   |                     | 3000                 | 0.24                           | 520                     |
| ELJND18N□F | 18         |                              |                     |      |                     | 3000                 | 0.29                           | 480                     |
| ELJND22N□F | 22         |                              |                     | 15   |                     | 2600                 | 0.29                           | 465                     |
| ELJND27N□F | 27         |                              |                     |      |                     | 2500                 | 0.34                           | 455                     |
| ELJND33N□F | 33         | K : ±10 %<br>or<br>J : ± 5 % | 100                 | 15   | 100                 | 2050                 | 0.39                           | 395                     |
| ELJND39N□F | 39         |                              |                     |      |                     | 2000                 | 0.41                           | 390                     |
| ELJND47N□F | 47         |                              |                     |      |                     | 1650                 | 0.46                           | 385                     |
| ELJND56N□F | 56         |                              |                     |      |                     | 1550                 | 0.51                           | 360                     |
| ELJND68N□F | 68         |                              |                     |      |                     | 1450                 | 0.57                           | 340                     |
| ELJND82N□F | 82         |                              |                     |      |                     | 1100                 | 0.63                           | 330                     |
| ELJNDR10□F | 100        |                              | 25.2                | 8    | 25.2                | 800                  | 0.86                           | 285                     |
| ELJNDR12□F | 120        |                              |                     |      |                     | 600                  | 0.99                           | 275                     |
| ELJNDR15□F | 150        |                              |                     | 10   |                     | 600                  | 1.47                           | 230                     |
| ELJNDR18□F | 180        |                              |                     |      |                     | 600                  | 1.61                           | 195                     |
| ELJNDR22□F | 220        |                              |                     |      |                     | 500                  | 1.84                           | 170                     |
| ELJNDR27□F | 270        |                              |                     |      |                     | 300                  | 1.95                           | 165                     |
| ELJNDR33□F | 330        | 200                          |                     |      |                     | 2.16                 | 160                            |                         |
| ELJNDR39□F | 390        | 150                          |                     |      |                     | 2.37                 | 150                            |                         |
| ELJNDR47□F | 470        | 150                          |                     |      |                     | 2.56                 | 145                            |                         |
| ELJNDR56□F | 560        | 100                          |                     |      |                     | 2.69                 | 140                            |                         |
| ELJNDR68□F | 680        | 100                          |                     |      |                     | 3.02                 | 130                            |                         |
| ELJNDR82□F | 820        | 80                           |                     |      |                     | 3.38                 | 125                            |                         |
| ELJND1R0□F | 1000       | 7.96                         | 8                   | 7.96 | 80                  | 3.88                 | 120                            |                         |

□ : Symbol of Tolerance \*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ NC Type 2520 (1008)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 2000 pcs./Reel

### ■ Standard Parts

| Part No.   | Inductance |                              |                     | Q    |                     | SRF *1<br>(MHz) min. | R <sub>DC</sub> *2<br>(Ω) max. | DC Current<br>(mA) max. |
|------------|------------|------------------------------|---------------------|------|---------------------|----------------------|--------------------------------|-------------------------|
|            | (nH)       | Tolerance<br>(%)             | Test Freq.<br>(MHz) | min. | Test Freq.<br>(MHz) |                      |                                |                         |
| ELJNC10N□F | 10         | K : ±10 %                    | 100                 | 10   | 100                 | 2500                 | 0.32                           | 280                     |
| ELJNC12N□F | 12         |                              |                     |      |                     | 2200                 | 0.34                           | 270                     |
| ELJNC15N□F | 15         |                              |                     |      |                     | 1800                 | 0.38                           | 255                     |
| ELJNC18N□F | 18         |                              |                     |      |                     | 1550                 | 0.40                           | 250                     |
| ELJNC22N□F | 22         |                              |                     |      |                     | 1350                 | 0.43                           | 240                     |
| ELJNC27N□F | 27         |                              |                     |      |                     | 1150                 | 0.47                           | 230                     |
| ELJNC33N□F | 33         | K : ±10 %<br>or<br>J : ± 5 % | 100                 | 15   | 100                 | 1000                 | 0.51                           | 220                     |
| ELJNC39N□F | 39         |                              |                     |      |                     | 890                  | 0.55                           | 215                     |
| ELJNC47N□F | 47         |                              |                     |      |                     | 770                  | 0.59                           | 205                     |
| ELJNC56N□F | 56         |                              |                     |      |                     | 670                  | 0.63                           | 200                     |
| ELJNC68N□F | 68         |                              |                     |      |                     | 590                  | 0.68                           | 190                     |
| ELJNC82N□F | 82         |                              |                     |      |                     | 520                  | 0.73                           | 185                     |
| ELJNCR10□F | 100        |                              | 25.2                | 10   | 25.2                | 460                  | 0.80                           | 175                     |
| ELJNCR12□F | 120        |                              |                     |      |                     | 400                  | 0.87                           | 170                     |
| ELJNCR15□F | 150        |                              |                     |      |                     | 340                  | 0.98                           | 160                     |
| ELJNCR18□F | 180        |                              |                     |      |                     | 300                  | 1.05                           | 155                     |
| ELJNCR22□F | 220        |                              |                     |      |                     | 260                  | 1.15                           | 145                     |
| ELJNCR27□F | 270        |                              |                     |      |                     | 230                  | 1.25                           | 140                     |
| ELJNCR33□F | 330        |                              |                     |      |                     | 200                  | 1.37                           | 135                     |
| ELJNCR39□F | 390        |                              |                     |      |                     | 180                  | 1.47                           | 130                     |
| ELJNCR47□F | 470        |                              |                     |      |                     | 160                  | 1.58                           | 125                     |
| ELJNCR56□F | 560        |                              |                     |      |                     | 145                  | 1.70                           | 120                     |
| ELJNCR68□F | 680        |                              |                     |      |                     | 130                  | 1.85                           | 110                     |
| ELJNCR82□F | 820        |                              |                     |      |                     | 100                  | 2.10                           | 100                     |

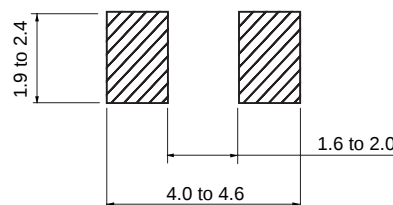
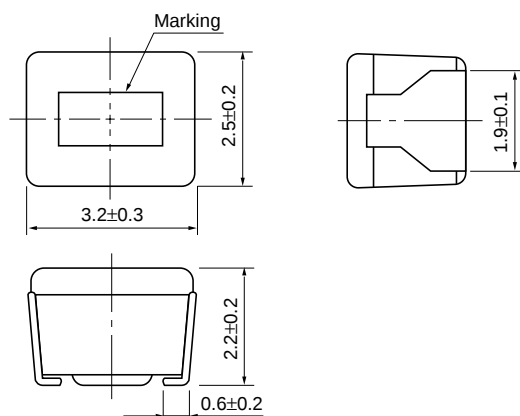
□ : Symbol of Tolerance

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ NA Type 3225 (1210)

● Dimensions in mm (not to scale)

● Recommended Land Pattern in mm (not to scale)



### ■ Standard Packing Quantity

● 2000 pcs./Reel

### ■ Standard Parts

| Part No.   | Inductance |                              |                     | Q    |                     | SRF *1<br>(MHz) min. | R <sub>DC</sub> *2<br>(Ω) max. | DC Current<br>(mA) max. |
|------------|------------|------------------------------|---------------------|------|---------------------|----------------------|--------------------------------|-------------------------|
|            | (nH)       | Tolerance<br>(%)             | Test Freq.<br>(MHz) | min. | Test Freq.<br>(MHz) |                      |                                |                         |
| ELJNA47N□F | 47         | M : ±20 %                    | 100                 | 10   | 100                 | 680                  | 0.20                           | 450                     |
| ELJNA56N□F | 56         |                              |                     |      |                     | 600                  | 0.22                           | 420                     |
| ELJNA68N□F | 68         |                              |                     |      |                     | 540                  | 0.25                           | 400                     |
| ELJNA82N□F | 82         |                              |                     |      |                     | 500                  | 0.27                           | 380                     |
| ELJNAR10□F | 100        |                              |                     |      |                     | 450                  | 0.30                           | 360                     |
| ELJNAR12□F | 120        |                              | 25.2                |      | 25.2                | 400                  | 0.67                           | 240                     |
| ELJNAR15□F | 150        |                              |                     |      |                     | 350                  | 0.72                           | 230                     |
| ELJNAR18□F | 180        |                              |                     |      |                     | 320                  | 0.81                           | 220                     |
| ELJNAR22□F | 220        |                              |                     |      |                     | 280                  | 0.90                           | 210                     |
| ELJNAR27□F | 270        | 250                          |                     |      |                     | 1.0                  | 200                            |                         |
| ELJNAR33□F | 330        | K : ±10 %<br>or<br>J : ± 5 % | 220                 |      |                     | 1.1                  | 190                            |                         |
| ELJNAR39□F | 390        |                              | 200                 |      |                     | 1.2                  | 180                            |                         |
| ELJNAR47□F | 470        |                              | 180                 |      |                     | 1.4                  | 175                            |                         |
| ELJNAR56□F | 560        |                              | 160                 |      |                     | 1.5                  | 170                            |                         |
| ELJNAR68□F | 680        |                              | 150                 |      | 1.7                 | 155                  |                                |                         |
| ELJNAR82□F | 820        |                              | 135                 |      | 1.9                 | 145                  |                                |                         |
| ELJNA1R0□F | 1000       |                              | J : ± 5 %           | 1    | 13                  | 7.96                 | 120                            | 2.1                     |
| ELJNA1R2□F | 1200       | 110                          |                     |      |                     |                      | 2.3                            | 120                     |
| ELJNA1R5□F | 1500       | 95                           |                     |      |                     |                      | 2.7                            | 115                     |
| ELJNA1R8□F | 1800       | 85                           |                     |      |                     |                      | 3.0                            | 110                     |
| ELJNA2R2□F | 2200       | 80                           |                     |      |                     |                      | 3.2                            | 110                     |
| ELJNA2R7□F | 2700       | 70                           |                     |      |                     |                      | 3.6                            | 105                     |
| ELJNA3R3□F | 3300       | 62                           |                     |      |                     |                      | 4.2                            | 100                     |
| ELJNA3R9□F | 3900       | 57                           |                     |      |                     |                      | 4.4                            | 95                      |
| ELJNA4R7□F | 4700       | 52                           |                     |      |                     |                      | 7.7                            | 70                      |
| ELJNA5R6□F | 5600       | 46                           |                     |      |                     |                      | 8.7                            | 65                      |
| ELJNA6R8□F | 6800       | 42                           |                     |      |                     |                      | 10                             | 60                      |
| ELJNA8R2□F | 8200       | 38                           |                     |      |                     |                      | 11                             | 60                      |

□ : Symbol of Tolerance \*1 : Self Resonant Frequency \*2 : DC Resistance

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.