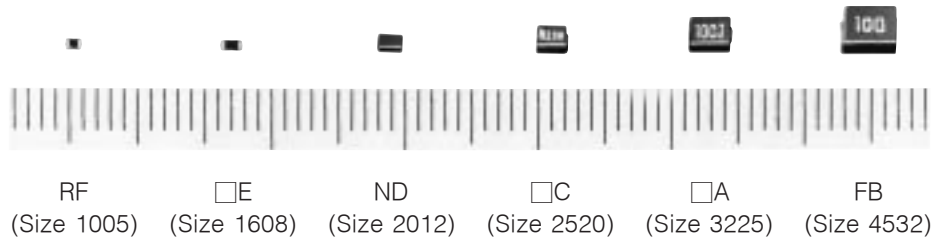


**Chip Inductors**

Japan

Series: **Chip**  
 Type: **RF, RE, ND, NC, NA, FC, FA, FB, SA, PE, PC, PA, EA**



Non winding (RF, E) and wire wound type chip inductors for automatic mounting and high-density mounting

Industrial Property: Patents 6 (incl. pending)

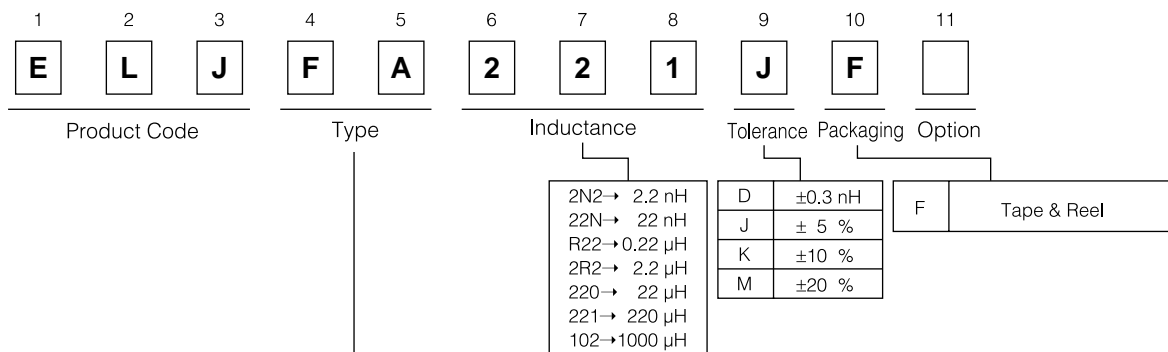
■ **Features**

- High Q
- Good for mounting
- Wide allowable range (1.0 nH to 1000 μH)

■ **Recommended Applications**

- CTV, VTR, HIC, HDD, FDD, Cordless telephones, Portable telephones  
 Pagers, Video cameras

■ **Explanation of Part Numbers**



| Types \ Styles    | F 1005 (0402)     | E 1608 (0603) | D 2012 (0805) | C 2520 (1008) | A 3225 (1210) | B 4532 (1812) |
|-------------------|-------------------|---------------|---------------|---------------|---------------|---------------|
|                   | Non Magnetic Core | RF            | RE            | ND            | NC            | NA            |
| Regular           | -                 | -             | -             | FC            | FA            | FB            |
| Shield            | -                 | -             | -             | -             | SA            | -             |
| High Power        | -                 | PE            | -             | PC            | PA            | -             |
| Low DC resistance | -                 | -             | -             | -             | EA            | -             |

Size unit: mm

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

■ Inductance, Size Guide

|                   | Type NAME                        | L VALUE  |      |     |     |    |     |                    | Features   |
|-------------------|----------------------------------|--|------|-----|-----|----|-----|--------------------|--|
|                   |                                  | 0.001  | 0.01 | 0.1 | 1.0 | 10 | 100 | ( $\mu$ H)<br>1000 |  |
| Non Magnetic Core | 1005 (0402)<br>RF                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">D</div> <div style="border: 1px solid black; padding: 2px;">J</div> </div> <p>1.0 nH    6.8 nH    100 nH</p>  |      |     |     |    |     |                    | Low inductance,<br>tight tolerance<br>Stable L value<br>against an environ-<br>mental condition<br>Suitable for high<br>frequency circuits |
|                   | 1608 (0603)<br>RE                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">D</div> <div style="border: 1px solid black; padding: 2px;">J</div> </div> <p>1.0 nH    3.9 nH    220 nH</p>  |      |     |     |    |     |                    |  |
|                   | 2012 (0805)<br>ND                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">K</div> <div style="border: 1px solid black; padding: 2px;">J, K</div> </div> <p>10 nH    33 nH    1000 nH</p>  |      |     |     |    |     |                    |  |
|                   | 2520 (1008)<br>NC                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">K</div> <div style="border: 1px solid black; padding: 2px;">J, K</div> </div> <p>10 nH    33 nH    820 nH</p>   |      |     |     |    |     |                    |  |
|                   | 3225 (1210)<br>NA                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">M</div> <div style="border: 1px solid black; padding: 2px;">K</div> <div style="border: 1px solid black; padding: 2px;">J</div> </div> <p>0.047 <math>\mu</math>H    0.22 <math>\mu</math>H    1.0 <math>\mu</math>H    8.2 <math>\mu</math>H</p> |      |     |     |    |     |                    |  |
| Regular           | 2520 (1008)<br>FC                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">K, M</div> <div style="border: 1px solid black; padding: 2px;">J, K</div> </div> <p>0.22 <math>\mu</math>H    1.0 <math>\mu</math>H    100 <math>\mu</math>H</p>  |      |     |     |    |     |                    | Suitable for various<br>applications   |
|                   | 3225 (1210)<br>FA                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">K, M</div> <div style="border: 1px solid black; padding: 2px;">J, K</div> </div> <p>0.22 <math>\mu</math>H    1.0 <math>\mu</math>H    220 <math>\mu</math>H</p>  |      |     |     |    |     |                    |  |
|                   | 3225 (1210)<br>SA<br>Mag. shield | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">K</div> </div> <p>10 <math>\mu</math>H    270 <math>\mu</math>H</p>   |      |     |     |    |     |                    |  |
|                   | 4532 (1812)<br>FB                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">J, K</div> </div> <p>100 <math>\mu</math>H    1000 <math>\mu</math>H</p>  |      |     |     |    |     |                    |  |
| High Power        | 1608 (0603)<br>PE <b>NEW</b>     | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">K</div> </div> <p>2.2 nH    22 nH</p>   |      |     |     |    |     |                    | Large DC current<br>Suitable for power<br>line as choke coil   |
|                   | 2520 (1008)<br>PC                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">M</div> <div style="border: 1px solid black; padding: 2px;">K</div> </div> <p>1.0 <math>\mu</math>H    6.8 <math>\mu</math>H    33 <math>\mu</math>H</p>  |      |     |     |    |     |                    |  |
|                   | 3225 (1210)<br>PA                | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">M</div> <div style="border: 1px solid black; padding: 2px;">K</div> </div> <p>1.0 <math>\mu</math>H    10 <math>\mu</math>H    330 <math>\mu</math>H</p>  |      |     |     |    |     |                    |  |
| Low DC resistance | 3225 (1210)<br>EA <b>NEW</b>     | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">M</div> <div style="border: 1px solid black; padding: 2px;">K</div> </div> <p>1.0 <math>\mu</math>H    10 <math>\mu</math>H    330 <math>\mu</math>H</p>  |      |     |     |    |     |                    | Low DC resistance  |

Size unit : mm

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

### 1. Non Magnetic Core Types RF, RE, ND, NC, NA

#### Examples : Type 1005(0402)RF

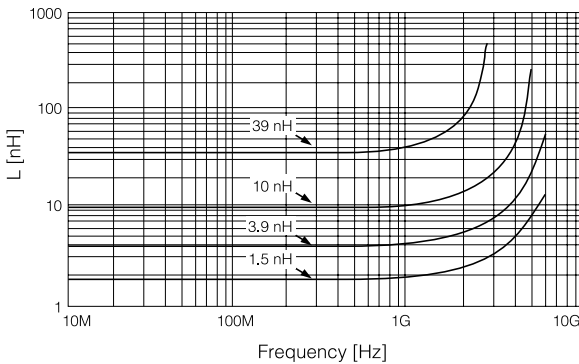
| Part No.    | Inductance |           | Q min. | L,Q Test-Freq. (MHz) | Q Typical (800 MHz) | SRF.*1 min.(MHz) | DCR.*2 max.(Ω) | DC current max.(mA) |
|-------------|------------|-----------|--------|----------------------|---------------------|------------------|----------------|---------------------|
|             | nH         | Tolerance |        |                      |                     |                  |                |                     |
| ELJRF1N0DF2 | 1.0        | ±0.3 nH   | 8      | 100                  | 21                  | 6000             | 0.05           | 400                 |
| ELJRF1N2DF2 | 1.2        |           |        |                      | 21                  | 6000             | 0.06           | 400                 |
| ELJRF1N5DF2 | 1.5        |           |        |                      | 21                  | 6000             | 0.07           | 400                 |
| ELJRF1N8DF2 | 1.8        |           |        |                      | 21                  | 6000             | 0.08           | 400                 |
| ELJRF2N2DF2 | 2.2        |           |        |                      | 21                  | 6000             | 0.09           | 400                 |
| ELJRF2N7DF2 | 2.7        |           |        |                      | 21                  | 5500             | 0.10           | 400                 |
| ELJRF3N3DF2 | 3.3        |           |        |                      | 21                  | 5500             | 0.12           | 400                 |
| ELJRF3N9DF2 | 3.9        |           |        |                      | 20                  | 5200             | 0.15           | 360                 |
| ELJRF4N7DF2 | 4.7        |           |        |                      | 20                  | 4800             | 0.17           | 360                 |
| ELJRF5N6DF2 | 5.6        |           |        |                      | 20                  | 4600             | 0.19           | 340                 |
| ELJRF6N8JF2 | 6.8        | ± 5 %     | 8      | 100                  | 19                  | 4000             | 0.30           | 320                 |
| ELJRF8N2JF2 | 8.2        |           |        |                      | 19                  | 3500             | 0.35           | 320                 |
| ELJRF10NJF2 | 10         |           |        |                      | 19                  | 2800             | 0.41           | 320                 |
| ELJRF12NJF2 | 12         |           |        |                      | 19                  | 2800             | 0.45           | 320                 |
| ELJRF15NJF2 | 15         |           |        |                      | 19                  | 2500             | 0.60           | 240                 |
| ELJRF18NJF2 | 18         |           |        |                      | 19                  | 2200             | 0.70           | 240                 |
| ELJRF22NJF2 | 22         |           |        |                      | 19                  | 2000             | 0.80           | 200                 |
| ELJRF27NJF2 | 27         |           |        |                      | 19                  | 1800             | 1.2            | 200                 |
| ELJRF33NJF2 | 33         |           |        |                      | 18                  | 1800             | 1.4            | 170                 |
| ELJRF39NJF2 | 39         |           |        |                      | 18                  | 1800             | 1.7            | 150                 |
| ELJRF47NJF2 | 47         | 17        | 1800   | 2.1                  | 140                 |                  |                |                     |
| ELJRF56NJF2 | 56         | 17        | 1500   | 2.5                  | 130                 |                  |                |                     |
| ELJRF68NJF2 | 68         | 15        | 1500   | 4.0                  | 120                 |                  |                |                     |
| ELJRF82NJF2 | 82         | 15        | 1400   | 4.5                  | 110                 |                  |                |                     |
| ELJRF10JF2  | 100        | 14        | 1200   | 5.5                  | 90                  |                  |                |                     |

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

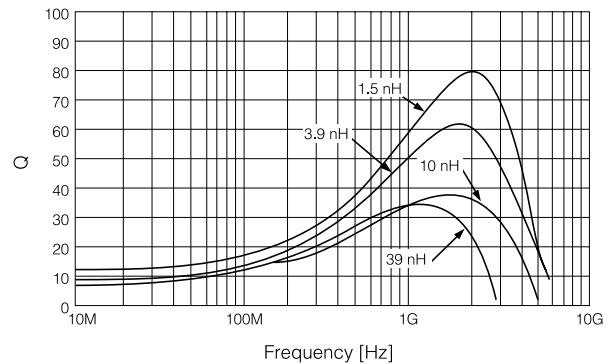
#### Performance Characteristics

Type: 1005 (0402) RF

L vs Frequency Characteristics



Q vs Frequency Characteristics



Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

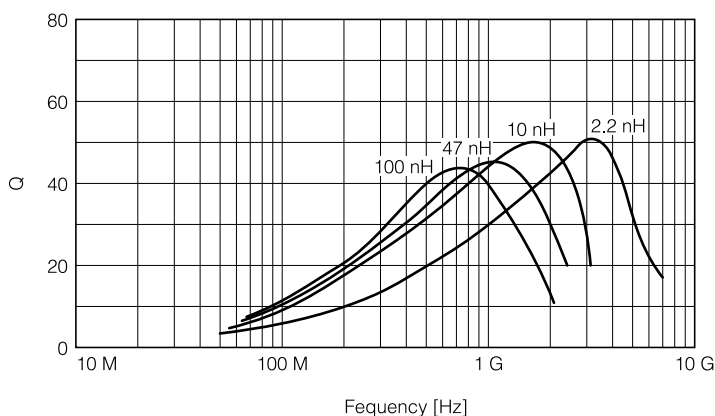
### Examples : Type 1608(0603)RE

| Part No.    | Inductance |           | Q min. | L, Q Test-Freq. (MHz) | Q Typical (800 MHz) | SRF*1 min.(MHz) | DCR*2 max.(Ω) | DC Current max.(mA) |
|-------------|------------|-----------|--------|-----------------------|---------------------|-----------------|---------------|---------------------|
|             | nH         | Tolerance |        |                       |                     |                 |               |                     |
| ELJRE1N0DF2 | 1.0        | ±0.3 nH   | 7      | 100                   | 47                  | 6000            | 0.05          | 500                 |
| ELJRE1N2DF2 | 1.2        |           |        |                       | 47                  | 6000            | 0.06          | 500                 |
| ELJRE1N5DF2 | 1.5        |           |        |                       | 47                  | 6000            | 0.07          | 500                 |
| ELJRE1N8DF2 | 1.8        |           | 8      |                       | 45                  | 6000            | 0.08          | 500                 |
| ELJRE2N2DF2 | 2.2        |           |        |                       | 35                  | 6000            | 0.09          | 500                 |
| ELJRE2N7DF2 | 2.7        |           | 35     |                       | 6000                | 0.10            | 500           |                     |
| ELJRE3N3DF2 | 3.3        |           | ± 5 %  |                       | 9                   | 35              | 5500          | 0.12                |
| ELJRE3N9JF2 | 3.9        | 36        |        |                       |                     | 5500            | 0.15          | 450                 |
| ELJRE4N7JF2 | 4.7        | 36        |        |                       |                     | 4800            | 0.17          | 450                 |
| ELJRE5N6JF2 | 5.6        | 36        |        |                       |                     | 4600            | 0.18          | 430                 |
| ELJRE6N8JF2 | 6.8        | 36        |        |                       |                     | 3550            | 0.20          | 430                 |
| ELJRE8N2JF2 | 8.2        | 36        |        |                       |                     | 3500            | 0.28          | 400                 |
| ELJRE10NJF2 | 10         | 10        |        |                       | 37                  | 2800            | 0.32          | 400                 |
| ELJRE12NJF2 | 12         |           |        |                       | 37                  | 2800            | 0.35          | 400                 |
| ELJRE15NJF2 | 15         |           |        |                       | 38                  | 2500            | 0.41          | 350                 |
| ELJRE18NJF2 | 18         |           |        |                       | 39                  | 2300            | 0.45          | 350                 |
| ELJRE22NJF2 | 22         |           | 40     |                       | 2000                | 0.50            | 300           |                     |
| ELJRE27NJF2 | 27         |           | 41     |                       | 2000                | 0.55            | 300           |                     |
| ELJRE33NJF2 | 33         | 11        | 40     |                       | 1800                | 0.60            | 300           |                     |
| ELJRE39NJF2 | 39         |           | 39     |                       | 1800                | 0.80            | 300           |                     |
| ELJRE47NJF2 | 47         |           | 38     |                       | 1800                | 0.95            | 250           |                     |
| ELJRE56NJF3 | 56         |           | 12     |                       | 35                  | 1800            | 1.2           | 250                 |
| ELJRE68NJF3 | 68         |           |        |                       | 35                  | 1500            | 1.3           | 250                 |
| ELJRE82NJF3 | 82         |           |        |                       | 33                  | 1500            | 1.5           | 250                 |
| ELJRER10JF3 | 100        | 30        |        |                       | 1300                | 1.8             | 200           |                     |
| ELJRER12JF3 | 120        | 5         | 25.2   |                       | 25                  | 1200            | 3.0           | 130                 |
| ELJRER15JF3 | 150        |           |        |                       | 22                  | 1100            | 4.5           | 100                 |
| ELJRER18JF3 | 180        |           |        |                       | 4                   | 20              | 1000          | 6.5                 |
| ELJRER22JF3 | 220        | —         |        | 900                   |                     | 7.5             | 70            |                     |

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

### Q-Frequency Characteristics

Type: 1608 (0603) RE



Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

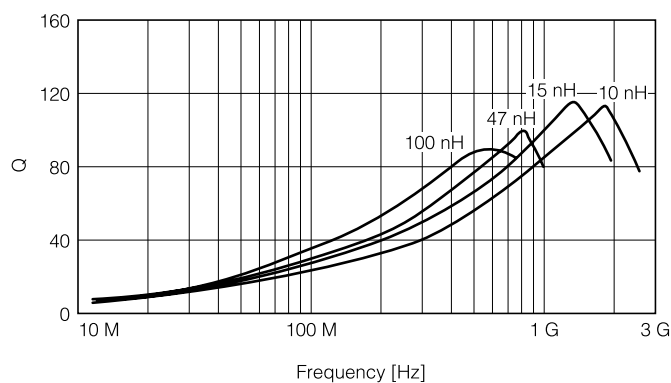
### Examples : Type 2012(0805)ND

| Part No.     | Inductance |               | Q min. | L, Q Test-Freq. (MHz) | Q Typical (800 MHz) | SRF* <sup>1</sup> min.(MHz) | DCR* <sup>2</sup> max.(Ω) | DC Current max.(mA) |     |
|--------------|------------|---------------|--------|-----------------------|---------------------|-----------------------------|---------------------------|---------------------|-----|
|              | nH         | Tolerance     |        |                       |                     |                             |                           |                     |     |
| ELJND10NKF   | 10         | ±10 %         | 10     | 100                   | 72                  | 3300                        | 0.18                      | 540                 |     |
| ELJND12NKF   | 12         |               |        |                       | 67                  | 3300                        | 0.24                      | 535                 |     |
| ELJND15NKF   | 15         |               | 12     |                       | 73                  | 3000                        | 0.24                      | 520                 |     |
| ELJND18NKF   | 18         |               |        |                       | 74                  | 3000                        | 0.29                      | 480                 |     |
| ELJND22NKF   | 22         |               | 15     |                       | 75                  | 2600                        | 0.29                      | 465                 |     |
| ELJND27NKF   | 27         |               |        |                       | 73                  | 2500                        | 0.34                      | 455                 |     |
| ELJND33NJ/KF | 33         | ±5 %<br>±10 % | 15     | 25.2                  | 80                  | 2050                        | 0.39                      | 395                 |     |
| ELJND39NJ/KF | 39         |               |        |                       | 72                  | 2000                        | 0.41                      | 390                 |     |
| ELJND47NJ/KF | 47         |               | 71     |                       | 1650                | 0.46                        | 385                       |                     |     |
| ELJND56NJ/KF | 56         |               | 63     |                       | 1550                | 0.51                        | 360                       |                     |     |
| ELJND68NJ/KF | 68         |               | 57     |                       | 1450                | 0.57                        | 340                       |                     |     |
| ELJND82NJ/KF | 82         |               | 56     |                       | 1100                | 0.63                        | 330                       |                     |     |
| ELJNDR10J/KF | 100        |               | 8      |                       | 8                   | 51                          | 800                       | 0.86                | 285 |
| ELJNDR12J/KF | 120        |               |        |                       |                     | 32                          | 600                       | 0.99                | 275 |
| ELJNDR15J/KF | 150        |               | 10     |                       | 10                  | 36                          | 600                       | 1.47                | 230 |
| ELJNDR18J/KF | 180        |               |        |                       |                     | 34                          | 600                       | 1.61                | 195 |
| ELJNDR22J/KF | 220        | —             |        | 500                   |                     | 1.84                        | 170                       |                     |     |
| ELJNDR27J/KF | 270        | —             |        | 300                   |                     | 1.95                        | 165                       |                     |     |
| ELJNDR33J/KF | 330        | —             |        | 200                   |                     | 2.16                        | 160                       |                     |     |
| ELJNDR39J/KF | 390        | —             |        | 150                   |                     | 2.37                        | 150                       |                     |     |
| ELJNDR47J/KF | 470        | —             |        | 150                   |                     | 2.56                        | 145                       |                     |     |
| ELJNDR56J/KF | 560        | —             |        | 100                   |                     | 2.69                        | 140                       |                     |     |
| ELJNDR68J/KF | 680        | —             | 100    | 3.02                  | 130                 |                             |                           |                     |     |
| ELJNDR82J/KF | 820        | —             | 8      | —                     | 80                  | 3.38                        | 125                       |                     |     |
| ELJND1R0J/KF | 1000       | —             | 8      | 7.96                  | —                   | 80                          | 3.88                      | 120                 |     |

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

### Q-Frequency Characteristics

Type: 2012 (0805) ND



Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

## ■ Examples : Type 2520(1008)NC

| Part No.     | Inductance |           | Q min. | L, Q Test Freq.( MHz) | SRF * <sup>1</sup> min.(MHz) | DCR * <sup>2</sup> max.(Ω) | DC Current max.(mA) |     |
|--------------|------------|-----------|--------|-----------------------|------------------------------|----------------------------|---------------------|-----|
|              | nH         | Tolerance |        |                       |                              |                            |                     |     |
| ELJNC10NKF   | 10         | ± 10 %    | 10     | 100                   | 2500                         | 0.32                       | 280                 |     |
| ELJNC12NKF   | 12         |           |        |                       | 2200                         | 0.34                       | 270                 |     |
| ELJNC15NKF   | 15         |           |        |                       | 1800                         | 0.38                       | 255                 |     |
| ELJNC18NKF   | 18         |           |        |                       | 1550                         | 0.40                       | 250                 |     |
| ELJNC22NKF   | 22         |           |        |                       | 1350                         | 0.43                       | 240                 |     |
| ELJNC27NKF   | 27         | 1150      | 0.47   |                       | 230                          |                            |                     |     |
| ELJNC33NK/JF | 33         | ± 10 %    | 15     |                       | 1000                         | 0.51                       | 220                 |     |
| ELJNC39NK/JF | 39         |           |        |                       | 890                          | 0.55                       | 215                 |     |
| ELJNC47NK/JF | 47         |           |        |                       | 770                          | 0.59                       | 205                 |     |
| ELJNC56NK/JF | 56         |           |        |                       | 670                          | 0.63                       | 200                 |     |
| ELJNC68NK/JF | 68         |           |        | 590                   | 0.68                         | 190                        |                     |     |
| ELJNC82NK/JF | 82         |           |        | 520                   | 0.73                         | 185                        |                     |     |
| ELJNCR10K/JF | 100        |           |        | ± 10 %<br>± 5 %       | 10                           | 460                        | 0.80                | 175 |
| ELJNCR12K/JF | 120        |           |        |                       |                              | 400                        | 0.87                | 170 |
| ELJNCR15K/JF | 150        |           |        |                       |                              | 340                        | 0.98                | 160 |
| ELJNCR18K/JF | 180        |           |        |                       |                              | 300                        | 1.05                | 155 |
| ELJNCR22K/JF | 220        | 260       | 1.15   |                       |                              | 145                        |                     |     |
| ELJNCR27K/JF | 270        | 230       | 1.25   |                       |                              | 140                        |                     |     |
| ELJNCR33K/JF | 330        | 200       | 1.37   |                       |                              | 135                        |                     |     |
| ELJNCR39K/JF | 390        | 180       | 1.47   |                       |                              | 130                        |                     |     |
| ELJNCR47K/JF | 470        | 160       | 1.58   |                       |                              | 125                        |                     |     |
| ELJNCR56K/JF | 560        | 145       | 1.70   |                       |                              | 120                        |                     |     |
| ELJNCR68K/JF | 680        | 130       | 1.85   | 110                   |                              |                            |                     |     |
| ELJNCR82K/JF | 820        | 100       | 2.10   | 100                   |                              |                            |                     |     |

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

## ■ Examples : Type 3225(1210)NA

| Part No.   | Inductance |             |           | Q    |             | SRF * <sup>1</sup> min.(MHz) | DCR * <sup>2</sup> max.(Ω) | DC Current max.(mA) |
|------------|------------|-------------|-----------|------|-------------|------------------------------|----------------------------|---------------------|
|            | μH         | Freq. (MHz) | Tolerance | min. | Freq. (MHz) |                              |                            |                     |
| ELJNA47NMF | 0.047      | 100         | ±20 %     | 10   | 100         | 680                          | 0.20                       | 450                 |
| ELJNA56NMF | 0.056      |             |           |      |             | 600                          | 0.22                       | 420                 |
| ELJNA68NMF | 0.068      |             |           |      |             | 540                          | 0.25                       | 400                 |
| ELJNA82NMF | 0.082      |             |           |      |             | 500                          | 0.27                       | 380                 |
| ELJNAR10MF | 0.10       |             |           |      |             | 450                          | 0.30                       | 360                 |
| ELJNAR12MF | 0.12       | 25.2        | ± 10 %    |      | 25.2        | 400                          | 0.67                       | 240                 |
| ELJNAR15MF | 0.15       |             |           |      |             | 350                          | 0.72                       | 230                 |
| ELJNAR18MF | 0.18       |             |           |      |             | 320                          | 0.81                       | 220                 |
| ELJNAR22KF | 0.22       |             |           |      |             | 280                          | 0.90                       | 210                 |
| ELJNAR27KF | 0.27       |             |           |      |             | 250                          | 1.0                        | 200                 |
| ELJNAR33KF | 0.33       | 1.0         | ± 5 %     | 13   | 7.96        | 220                          | 1.1                        | 190                 |
| ELJNAR39KF | 0.39       |             |           |      |             | 200                          | 1.2                        | 180                 |
| ELJNAR47KF | 0.47       |             |           |      |             | 180                          | 1.4                        | 175                 |
| ELJNAR56KF | 0.56       |             |           |      |             | 160                          | 1.5                        | 170                 |
| ELJNAR68KF | 0.68       |             |           |      |             | 150                          | 1.7                        | 155                 |
| ELJNAR82KF | 0.82       |             |           |      |             | 135                          | 1.9                        | 145                 |
| ELJNA1R0JF | 1.0        |             |           |      |             | 120                          | 2.1                        | 125                 |
| ELJNA1R2JF | 1.2        |             |           |      |             | 110                          | 2.3                        | 120                 |
| ELJNA1R5JF | 1.5        |             |           |      |             | 95                           | 2.7                        | 115                 |
| ELJNA1R8JF | 1.8        |             |           |      |             | 85                           | 3.0                        | 110                 |
| ELJNA2R2JF | 2.2        | 80          | 3.2       | 110  |             |                              |                            |                     |
| ELJNA2R7JF | 2.7        | 70          | 3.6       | 105  |             |                              |                            |                     |
| ELJNA3R3JF | 3.3        | 62          | 4.2       | 100  |             |                              |                            |                     |
| ELJNA3R9JF | 3.9        | 57          | 4.4       | 95   |             |                              |                            |                     |
| ELJNA4R7JF | 4.7        | 52          | 7.7       | 70   |             |                              |                            |                     |
| ELJNA5R6JF | 5.6        | 46          | 8.7       | 65   |             |                              |                            |                     |
| ELJNA6R8JF | 6.8        | 42          | 10        | 60   |             |                              |                            |                     |
| ELJNA8R2JF | 8.2        | 38          | 11        | 60   |             |                              |                            |                     |

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

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

## 2. Normal Types FC, FA, SA, FB

## ■ Examples : Type 2520(1008)FC

| Part No.     | Inductance |                | Q min. | L, Q Test Freq.( MHz) | SRF* <sup>1</sup> min.(MHz) | DCR* <sup>2</sup> max.(Ω) | DC Current max.(mA) |
|--------------|------------|----------------|--------|-----------------------|-----------------------------|---------------------------|---------------------|
|              | μH         | Tolerance      |        |                       |                             |                           |                     |
| ELJFCR22M/KF | 0.22       | ±20 %<br>±10 % |        | 25.2                  | 230                         | 0.70                      | 190                 |
| ELJFCR27M/KF | 0.27       |                |        |                       | 210                         | 0.75                      | 180                 |
| ELJFCR33M/KF | 0.33       |                |        |                       | 190                         | 0.85                      | 170                 |
| ELJFCR39M/KF | 0.39       |                |        |                       | 175                         | 0.95                      | 160                 |
| ELJFCR47M/KF | 0.47       |                |        |                       | 160                         | 1.0                       | 155                 |
| ELJFCR56M/KF | 0.56       |                |        |                       | 150                         | 1.1                       | 150                 |
| ELJFCR68M/KF | 0.68       |                |        |                       | 135                         | 1.25                      | 140                 |
| ELJFCR82M/KF | 0.82       |                |        |                       | 125                         | 1.4                       | 130                 |
| ELJFC1R0K/JF | 1.0        | ±10 %<br>± 5 % | 25     | 7.96                  | 115                         | 0.65                      | 195                 |
| ELJFC1R2K/JF | 1.2        |                |        |                       | 100                         | 0.75                      | 180                 |
| ELJFC1R5K/JF | 1.5        |                |        |                       | 90                          | 0.85                      | 170                 |
| ELJFC1R8K/JF | 1.8        |                |        |                       | 85                          | 0.95                      | 160                 |
| ELJFC2R2K/JF | 2.2        |                |        |                       | 80                          | 1.05                      | 155                 |
| ELJFC2R7K/JF | 2.7        |                |        |                       | 75                          | 1.2                       | 145                 |
| ELJFC3R3K/JF | 3.3        |                |        |                       | 65                          | 1.3                       | 135                 |
| ELJFC3R9K/JF | 3.9        |                |        |                       | 60                          | 1.4                       | 130                 |
| ELJFC4R7K/JF | 4.7        |                |        |                       | 55                          | 1.55                      | 125                 |
| ELJFC5R6K/JF | 5.6        |                |        |                       | 50                          | 1.75                      | 120                 |
| ELJFC6R8K/JF | 6.8        |                | 45     | 1.95                  | 115                         |                           |                     |
| ELJFC8R2K/JF | 8.2        |                | 40     | 2.2                   | 105                         |                           |                     |
| ELJFC100K/JF | 10         |                | 32     | 3.5                   | 80                          |                           |                     |
| ELJFC120K/JF | 12         |                | 30     | 3.8                   | 75                          |                           |                     |
| ELJFC150K/JF | 15         |                | 28     | 4.4                   | 70                          |                           |                     |
| ELJFC180K/JF | 18         |                | 25     | 5.0                   | 65                          |                           |                     |
| ELJFC220K/JF | 22         |                | 22     | 5.8                   | 60                          |                           |                     |
| ELJFC270K/JF | 27         |                | 21     | 6.3                   | 115                         |                           |                     |
| ELJFC330K/JF | 33         |                | 20     | 7.1                   | 110                         |                           |                     |
| ELJFC390K/JF | 39         |                | 18     | 9.5                   | 90                          |                           |                     |
| ELJFC470K/JF | 47         | 17             | 11.0   | 80                    |                             |                           |                     |
| ELJFC560K/JF | 56         | 16             | 12.1   | 75                    |                             |                           |                     |
| ELJFC680K/JF | 68         | 15             | 16.6   | 70                    |                             |                           |                     |
| ELJFC820K/JF | 82         | 13             | 19.0   | 65                    |                             |                           |                     |
| ELJFC101K/JF | 100        | 15             | 0.796  | 12                    | 21.0                        | 60                        |                     |

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

■ Examples : Type 3225(1210)FA

| Part No.      | Inductance |                | Q min. | L , Q Test Freq.( MHz) | SRF*1 min.(MHz) | DCR*2 max.(Ω) | DC Current max.(mA) |     |     |
|---------------|------------|----------------|--------|------------------------|-----------------|---------------|---------------------|-----|-----|
|               | μH         | Tolerance      |        |                        |                 |               |                     |     |     |
| ELJFAR22M/KF2 | 0.22       | ±20 %<br>±10 % | 25     | 25.2                   | 230             | 0.29          | 360                 |     |     |
| ELJFAR27M/KF2 | 0.27       |                |        |                        | 210             | 0.32          | 345                 |     |     |
| ELJFAR33M/KF2 | 0.33       |                |        |                        | 190             | 0.35          | 330                 |     |     |
| ELJFAR39M/KF2 | 0.39       |                |        |                        | 175             | 0.39          | 305                 |     |     |
| ELJFAR47M/KF2 | 0.47       |                |        |                        | 160             | 0.44          | 290                 |     |     |
| ELJFAR56M/KF2 | 0.56       |                |        |                        | 150             | 0.49          | 275                 |     |     |
| ELJFAR68M/KF2 | 0.68       |                |        |                        | 135             | 0.55          | 260                 |     |     |
| ELJFAR82M/KF2 | 0.82       |                |        |                        | 125             | 0.61          | 245                 |     |     |
| ELJFA1R0K/JF2 | 1.0        | ±10 %<br>± 5 % | 30     | 7.96                   | 115             | 0.69          | 230                 |     |     |
| ELJFA1R2K/JF2 | 1.2        |                |        |                        | 100             | 0.75          | 215                 |     |     |
| ELJFA1R5K/JF  | 1.5        |                |        |                        | 90              | 0.75          | 210                 |     |     |
| ELJFA1R8K/JF  | 1.8        |                |        |                        | 85              | 0.82          | 200                 |     |     |
| ELJFA2R2K/JF  | 2.2        |                |        |                        | 80              | 0.95          | 190                 |     |     |
| ELJFA2R7K/JF  | 2.7        |                |        |                        | 75              | 1.1           | 180                 |     |     |
| ELJFA3R3K/JF  | 3.3        |                |        |                        | 65              | 1.2           | 180                 |     |     |
| ELJFA3R9K/JF  | 3.9        |                |        |                        | 60              | 1.3           | 175                 |     |     |
| ELJFA4R7K/JF  | 4.7        |                |        |                        | 55              | 1.5           | 165                 |     |     |
| ELJFA5R6K/JF  | 5.6        |                |        |                        | 50              | 1.6           | 160                 |     |     |
| ELJFA6R8K/JF  | 6.8        |                |        |                        | 45              | 1.8           | 150                 |     |     |
| ELJFA8R2K/JF  | 8.2        |                |        |                        | 40              | 2.0           | 140                 |     |     |
| ELJFA100K/JF  | 10         |                |        |                        | 2.52            | 0.796         | 36                  | 2.1 | 140 |
| ELJFA120K/JF  | 12         |                |        |                        |                 |               | 33                  | 2.5 | 125 |
| ELJFA150K/JF  | 15         |                |        |                        |                 |               | 30                  | 2.8 | 120 |
| ELJFA180K/JF  | 18         |                |        |                        |                 |               | 27                  | 3.3 | 110 |
| ELJFA220K/JF  | 22         |                |        | 25                     |                 |               | 3.7                 | 105 |     |
| ELJFA270K/JF  | 27         |                |        | 22                     |                 |               | 5.0                 | 90  |     |
| ELJFA330K/JF  | 33         |                |        | 20                     |                 |               | 5.6                 | 85  |     |
| ELJFA390K/JF  | 39         |                |        | 20                     |                 |               | 6.4                 | 80  |     |
| ELJFA470K/JF  | 47         |                |        | 15                     |                 |               | 7.0                 | 75  |     |
| ELJFA560K/JF  | 56         |                |        | 15                     |                 |               | 8.0                 | 70  |     |
| ELJFA680K/JF  | 68         |                |        | 15                     |                 |               | 9.0                 | 65  |     |
| ELJFA820K/JF  | 82         |                |        | 11                     |                 |               | 10                  | 60  |     |
| ELJFA101K/JF  | 100        |                |        | 10                     |                 |               | 10                  | 60  |     |
| ELJFA121K/JF  | 120        |                |        | 10                     |                 |               | 11                  | 55  |     |
| ELJFA151K/JF  | 150        |                |        | 8                      |                 |               | 15                  | 50  |     |
| ELJFA181K/JF  | 180        |                |        | 7                      |                 |               | 17                  | 50  |     |
| ELJFA221K/JF  | 220        |                |        | 7                      | 21              | 45            |                     |     |     |

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



## ■ Examples : Type 3225(1210)SA

| Part No.   | Inductance |             |           | Q    |             | SRF*1<br>min.(MHz) | DCR *2<br>max.(Ω) | DC Current<br>max.(mA) |
|------------|------------|-------------|-----------|------|-------------|--------------------|-------------------|------------------------|
|            | μH         | Freq. (MHz) | Tolerance | min. | Freq. (MHz) |                    |                   |                        |
| ELJSA100KF | 10         | 1.0         | ±10 %     | 40   | 5.0         | 30                 | 1.8               | 18                     |
| ELJSA120KF | 12         |             |           |      |             | 28                 | 2.0               | 17                     |
| ELJSA150KF | 15         |             |           |      |             | 25                 | 2.2               | 15                     |
| ELJSA180KF | 18         |             |           |      |             | 23                 | 2.5               | 13                     |
| ELJSA220KF | 22         |             |           |      |             | 20                 | 2.8               | 12                     |
| ELJSA270KF | 27         |             |           |      |             | 18                 | 3.2               | 10                     |
| ELJSA330KF | 33         |             |           |      |             | 17                 | 3.5               | 10                     |
| ELJSA390KF | 39         |             |           |      | 15          | 3.8                | 9                 |                        |
| ELJSA470KF | 47         |             |           |      | 14          | 4.0                | 8                 |                        |
| ELJSA560KF | 56         |             |           |      | 13          | 4.5                | 7                 |                        |
| ELJSA680KF | 68         |             |           |      | 12          | 5.0                | 6                 |                        |
| ELJSA820KF | 82         |             |           |      | 11          | 6.0                | 6                 |                        |
| ELJSA101KF | 100        |             |           |      | 10          | 7.0                | 5                 |                        |
| ELJSA121KF | 120        |             |           |      | 9           | 8.0                | 5                 |                        |
| ELJSA151KF | 150        | 5           | 9.0       | 5    |             |                    |                   |                        |
| ELJSA181KF | 180        | 5           | 11        | 5    |             |                    |                   |                        |
| ELJSA221KF | 220        | 4           | 12        | 5    |             |                    |                   |                        |
| ELJSA271KF | 270        | 4           | 14        | 5    |             |                    |                   |                        |

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

## ■ Examples : Type 4532(1812)FB

| Part No.     | Inductance |             |                | Q    |             | SRF*1<br>min.(MHz) | DCR *2<br>max.(Ω) | DC Current<br>max.(mA) |
|--------------|------------|-------------|----------------|------|-------------|--------------------|-------------------|------------------------|
|              | μH         | Freq. (MHz) | Tolerance      | min. | Freq. (MHz) |                    |                   |                        |
| ELJFB101K/JF | 100        | 0.1         | ±10 %<br>± 5 % | 40   | 2.52        | 6.7                | 8.8               | 105                    |
| ELJFB121K/JF | 120        |             |                |      | 1.5         | 6.1                | 10                | 100                    |
| ELJFB151K/JF | 150        |             |                |      | 5.5         | 11                 | 95                |                        |
| ELJFB181K/JF | 180        |             |                |      | 5.1         | 13                 | 85                |                        |
| ELJFB221K/JF | 220        |             |                |      | 4.5         | 13                 | 85                |                        |
| ELJFB271K/JF | 270        |             |                |      | 4.1         | 14                 | 80                |                        |
| ELJFB331K/JF | 330        |             |                |      | 3.7         | 16                 | 75                |                        |
| ELJFB391K/JF | 390        |             |                | 3.3  | 19          | 70                 |                   |                        |
| ELJFB471K/JF | 470        |             |                | 3.3  | 31          | 55                 |                   |                        |
| ELJFB561K/JF | 560        |             |                | 2.7  | 35          | 50                 |                   |                        |
| ELJFB681K/JF | 680        |             |                | 2.5  | 39          | 50                 |                   |                        |
| ELJFB821K/JF | 820        |             |                | 2.4  | 45          | 45                 |                   |                        |
| ELJFB102K/JF | 1000       |             |                | 2.1  | 53          | 40                 |                   |                        |

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

**3. High Power Types PE, PC, PA**

## ■ examples : Type 1608(0603)PE

| Part No.   | Inductance |           | Q min. | L , Q Test Freq.( MHz) | SRF * <sup>1</sup> min.(MHz) | DCR * <sup>2</sup> max.(Ω) | DC Current max.(mA) |
|------------|------------|-----------|--------|------------------------|------------------------------|----------------------------|---------------------|
|            | nH         | Tolerance |        |                        |                              |                            |                     |
| ELJPE2N2KF | 2.2        | ± 10 %    | 8      | 100                    | 6000                         | 0.030                      | 2.1                 |
| ELJPE2N7KF | 2.7        |           |        |                        | 5500                         | 0.030                      | 2.1                 |
| ELJPE3N3KF | 3.3        |           |        |                        | 5500                         | 0.040                      | 2.1                 |
| ELJPE3N9KF | 3.9        |           |        |                        | 5200                         | 0.040                      | 2.1                 |
| ELJPE4N7KF | 4.7        |           |        |                        | 4800                         | 0.050                      | 2.1                 |
| ELJPE5N6KF | 5.6        |           |        |                        | 4600                         | 0.055                      | 2.1                 |
| ELJPE6N8KF | 6.8        |           | 4000   |                        | 0.055                        | 1.9                        |                     |
| ELJPE8N2KF | 8.2        |           | 3500   |                        | 0.060                        | 1.7                        |                     |
| ELJPE10NKF | 10         |           | 2800   |                        | 0.065                        | 1.4                        |                     |
| ELJPE12NKF | 12         |           | 2500   |                        | 0.080                        | 1.3                        |                     |
| ELJPE15NKF | 15         |           | 2200   |                        | 0.100                        | 0.9                        |                     |
| ELJPE18NKF | 18         |           | 2000   |                        | 0.120                        | 0.8                        |                     |
| ELJPE22NKF | 22         |           | 1800   |                        | 0.150                        | 0.7                        |                     |

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

## ■ Examples : Type 2520(1008)PC

| Part No.   | Inductance |           | Q min. | L , Q Test Freq.( MHz) | SRF * <sup>1</sup> min.(MHz) | DCR * <sup>2</sup> max.(Ω) | DC Current max.(mA) |
|------------|------------|-----------|--------|------------------------|------------------------------|----------------------------|---------------------|
|            | μH         | Tolerance |        |                        |                              |                            |                     |
| ELJPC1R0MF | 1.0        | ±20 %     | 10     | 7.96                   | 95                           | 0.45                       | 475                 |
| ELJPC1R5MF | 1.5        |           |        |                        | 85                           | 0.55                       | 435                 |
| ELJPC2R2MF | 2.2        |           |        |                        | 65                           | 0.65                       | 390                 |
| ELJPC3R3MF | 3.3        |           |        |                        | 55                           | 0.85                       | 340                 |
| ELJPC4R7MF | 4.7        |           |        |                        | 43                           | 1.2                        | 285                 |
| ELJPC6R8KF | 6.8        |           |        |                        | 8.5                          | 1.3                        | 170                 |
| ELJPC100KF | 10         | ±10 %     | 20     | 2.52                   | 32                           | 2.2                        | 210                 |
| ELJPC120KF | 12         |           |        |                        | 25                           | 2.7                        | 195                 |
| ELJPC150KF | 15         |           |        |                        | 21                           | 3.2                        | 175                 |
| ELJPC220KF | 22         |           |        |                        | 18                           | 4.0                        | 160                 |
| ELJPC330KF | 33         |           |        |                        | 16                           | 6.5                        | 120                 |

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

■ Examples : Type 3225(1210)PA

| Part No.   | Inductance |           | Q min. | L , Q Test Freq.( MHz) | SRF *1 min.(MHz) | DCR *2 max.(Ω) | DC Current max.(mA) |      |    |
|------------|------------|-----------|--------|------------------------|------------------|----------------|---------------------|------|----|
|            | μH         | Tolerance |        |                        |                  |                |                     |      |    |
| ELJPA1R0MF | 1.0        | ±20 %     | 7      | 7.96                   | 150              | 0.15           | 600                 |      |    |
| ELJPA1R5MF | 1.5        |           |        |                        | 110              | 0.18           | 550                 |      |    |
| ELJPA2R2MF | 2.2        |           |        |                        | 80               | 0.23           | 500                 |      |    |
| ELJPA3R3MF | 3.3        |           |        |                        | 58               | 0.28           | 400                 |      |    |
| ELJPA4R7MF | 4.7        |           |        |                        | 46               | 0.34           | 350                 |      |    |
| ELJPA6R8MF | 6.8        |           |        |                        | 38               | 0.42           | 300                 |      |    |
| ELJPA100KF | 10         | ±10 %     | 15     | 2.52                   | 23               | 0.50           | 240                 |      |    |
| ELJPA120KF | 12         |           |        |                        | 21               | 0.60           | 230                 |      |    |
| ELJPA150KF | 15         |           |        |                        | 18               | 0.74           | 220                 |      |    |
| ELJPA180KF | 18         |           |        |                        | 17               | 0.90           | 205                 |      |    |
| ELJPA220KF | 22         |           |        |                        | 15               | 1.15           | 185                 |      |    |
| ELJPA270KF | 27         |           |        |                        | 13               | 1.45           | 165                 |      |    |
| ELJPA330KF | 33         |           |        |                        | 12               | 1.65           | 155                 |      |    |
| ELJPA390KF | 39         |           |        |                        | 11               | 1.90           | 145                 |      |    |
| ELJPA470KF | 47         |           |        |                        | 9.5              | 2.25           | 135                 |      |    |
| ELJPA560KF | 56         |           |        |                        | 8.5              | 3.30           | 110                 |      |    |
| ELJPA680KF | 68         |           |        |                        | 7.5              | 3.70           | 105                 |      |    |
| ELJPA820KF | 82         |           |        |                        | 7.0              | 4.20           | 100                 |      |    |
| ELJPA101KF | 100        |           |        |                        | 20               | 0.796          | 6.5                 | 5.00 | 90 |
| ELJPA121KF | 120        |           |        |                        |                  |                | 6.0                 | 7.00 | 75 |
| ELJPA151KF | 150        | 5.5       | 8.00   | 70                     |                  |                |                     |      |    |
| ELJPA181KF | 180        | 5.0       | 9.50   | 65                     |                  |                |                     |      |    |
| ELJPA221KF | 220        | 4.0       | 11.0   | 60                     |                  |                |                     |      |    |
| ELJPA271KF | 270        | 3.5       | 14.5   | 55                     |                  |                |                     |      |    |
| ELJPA331KF | 330        | 3.0       | 16.0   | 50                     |                  |                |                     |      |    |

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

#### 4. Low DC resistance Type EA

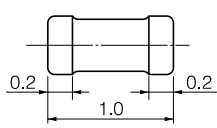
■ Examples : Type 3225(1210)EA

| Part No.   | Inductance |           | Q min. | L , Q Test Freq.( MHz) | SRF *1 min.(MHz) | DCR *2 max.(Ω) | DC Current max.(mA) |      |    |
|------------|------------|-----------|--------|------------------------|------------------|----------------|---------------------|------|----|
|            | μH         | Tolerance |        |                        |                  |                |                     |      |    |
| ELJEA1R0MF | 1.0        | ±20 %     | 7      | 7.96                   | 100              | 0.09           | 500                 |      |    |
| ELJEA1R5MF | 1.5        |           |        |                        | 80               | 0.10           | 390                 |      |    |
| ELJEA2R2MF | 2.2        |           |        |                        | 65               | 0.13           | 350                 |      |    |
| ELJEA3R3MF | 3.3        |           |        |                        | 50               | 0.16           | 270                 |      |    |
| ELJEA4R7MF | 4.7        |           |        |                        | 46               | 0.18           | 240                 |      |    |
| ELJEA6R8MF | 6.8        |           |        |                        | 36               | 0.25           | 200                 |      |    |
| ELJEA100KF | 10         | ±10 %     | 10     | 2.52                   | 29               | 0.34           | 160                 |      |    |
| ELJEA150KF | 15         |           |        |                        | 25               | 0.42           | 145                 |      |    |
| ELJEA220KF | 22         |           |        |                        | 18               | 0.65           | 115                 |      |    |
| ELJEA330KF | 33         |           |        |                        | 16               | 0.91           | 95                  |      |    |
| ELJEA470KF | 47         |           |        |                        | 13               | 1.30           | 80                  |      |    |
| ELJEA680KF | 68         |           |        |                        | 10               | 1.95           | 60                  |      |    |
| ELJEA101KF | 100        |           |        |                        | 20               | 0.796          | 8.0                 | 3.12 | 50 |
| ELJEA151KF | 150        |           |        |                        |                  |                | 7.0                 | 4.03 | 45 |
| ELJEA221KF | 220        |           |        |                        |                  |                | 5.0                 | 7.15 | 35 |
| ELJEA331KF | 330        |           |        |                        |                  |                | 4.0                 | 9.23 | 30 |

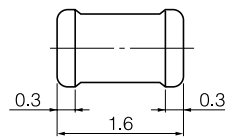
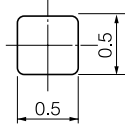
\*1 : Self Resonant Frequency \*2 : DC Resistance

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

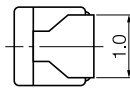
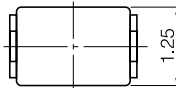
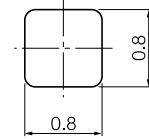
■ Dimensions in mm (not to scale)



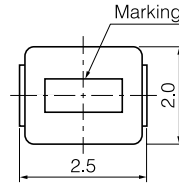
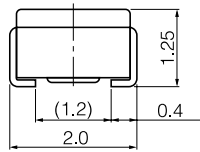
Type RF  
(1.0×0.5×0.5)



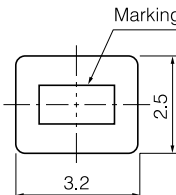
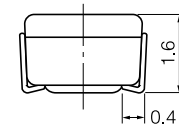
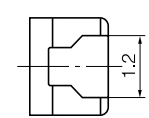
Type RE, PE  
(1.6×0.8×0.8)



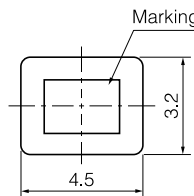
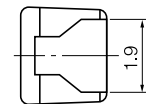
Type ND  
(2.0×1.25×1.25)



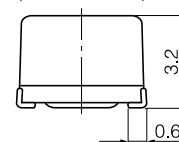
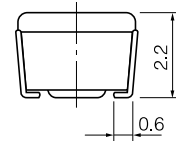
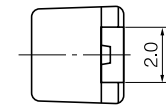
Types FC, NC, PC  
(2.5×2.0×1.6)



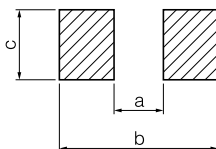
Types FA, SA, NA, PA, EA  
(3.2×2.5×2.2)



Type FB  
(4.5×3.2×3.2)



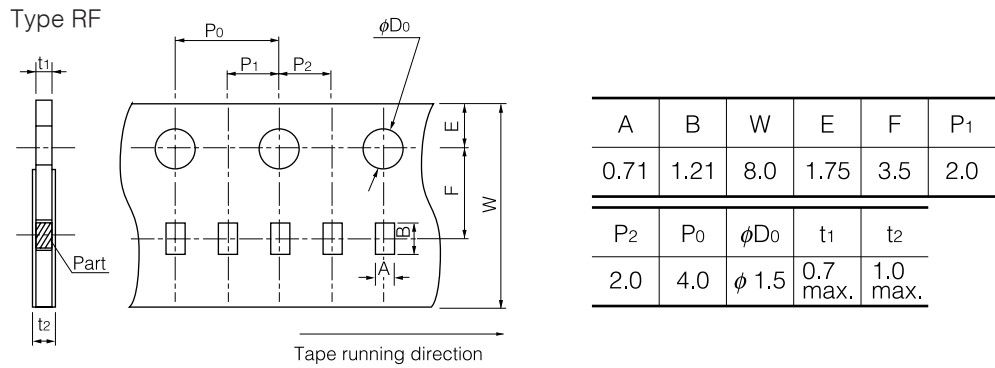
■ Recommended Land Pattern in mm (not to scale)



| Type | a       | b       | c       |
|------|---------|---------|---------|
| RF   | 0.5~0.6 | 1.5~1.7 | 0.5~0.6 |
| □E   | 0.8~1.0 | 2.0~2.6 | 0.7~0.9 |
| ND   | 1.0~1.2 | 3.0~3.8 | 0.9~1.3 |
| □C   | 1.4~1.5 | 3.5~4.0 | 1.2~1.6 |
| □A   | 1.6~2.0 | 4.0~4.6 | 1.9~2.4 |
| FB   | 2.4~2.6 | 5.5~6.0 | 2.0~3.0 |

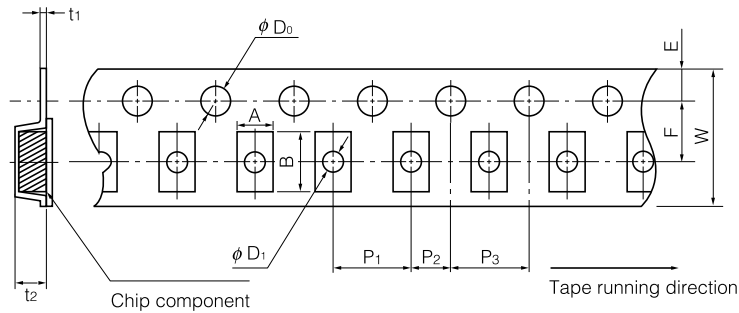
□E: RE, PE   □C: NC, FC, PC   □A: NA, FA, SA, PA, EA

■ Paper Tape Dimensions in mm (not to scale)

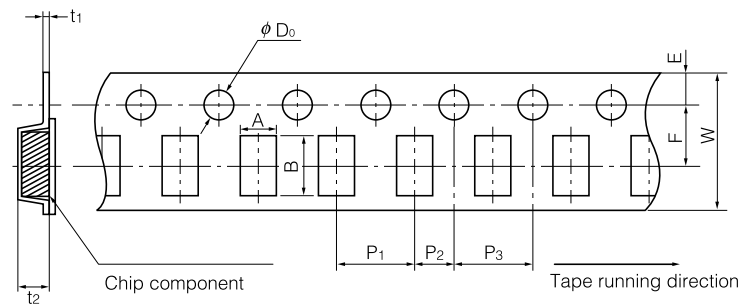


■ Embossed Carrier Tape Dimensions in mm (not to scale)

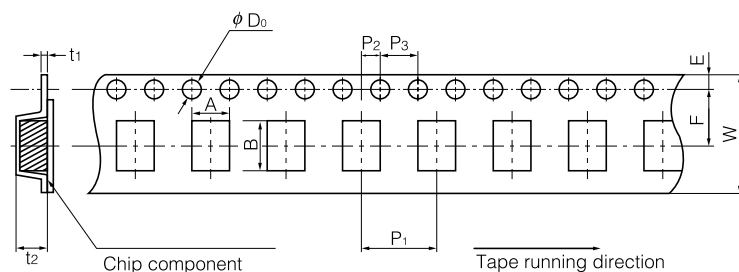
Types RE, PE, ND, NC, FC, PC (W=8 mm)



Types NA, FA, SA, PA, EA (W=8 mm)



Type FB (W=12 mm)



Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

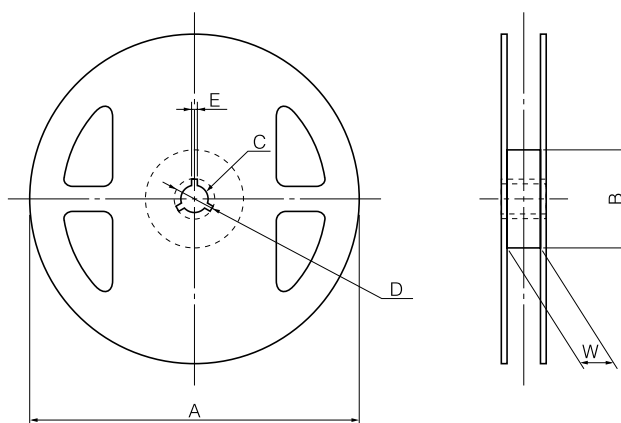
| Dimensions |                    | A          | B    | W  | F   | E    | P <sub>1</sub> | P <sub>2</sub> | P <sub>3</sub> | φD <sub>0</sub> | φD <sub>1</sub> | t <sub>1</sub> | t <sub>2</sub> |
|------------|--------------------|------------|------|----|-----|------|----------------|----------------|----------------|-----------------|-----------------|----------------|----------------|
|            |                    | Size/Types |      |    |     |      |                |                |                |                 |                 |                |                |
| 1608(0603) | RE, PE             | 1.0        | 1.8  | 8  | 3.5 | 1.75 | 4.0            | 2.0            | 4.0            | 1.5             | 0.6             | (0.27)         | 1.2            |
| 2012(0805) | ND                 | 1.45       | 2.25 | 8  | 3.5 | 1.75 | 4.0            | 2.0            | 4.0            | 1.5             | 1.0             | (0.25)         | 1.55           |
| 2520(1008) | NC, FC, PC         | 2.4        | 2.9  | 8  | 3.5 | 1.75 | 4.0            | 2.0            | 4.0            | 1.5             | 1.1             | (0.25)         | 1.85           |
| 3225(1210) | NA, FA, SA, PA, EA | 2.8        | 3.6  | 8  | 3.5 | 1.75 | 4.0            | 2.0            | 4.0            | 1.5             | —               | (0.25)         | 2.4            |
| 4532(1812) | FB                 | 3.6        | 4.9  | 12 | 5.5 | 1.75 | 8.0            | 2.0            | 4.0            | 1.5             | —               | (0.3)          | 3.5            |

### ■ Packaging Methods

#### ● Standard Packing Quantity and Mass

| Types              | Quantity, Mass |                       |
|--------------------|----------------|-----------------------|
|                    | Quantity       | Mass (Weight) Approx. |
| RF                 | 10000 pcs.     | —                     |
| RE, PE, ND         | 3000 pcs.      | 90 g                  |
| NC, FC, PC         | 2000 pcs.      | 100 g                 |
| NA, FA, SA, PA, EA | 2000 pcs.      | 170 g                 |
| FB                 | 500 pcs.       | 100 g                 |

### ■ Reel Dimensions in mm (not to scale)



| Types  | Dimensions |    |    |    |   |    |
|--|------------|----|----|----|---|----|
|  | A          | B  | C  | D  | E | W  |
| RF   | 180        | 60 | 13 | 21 | 2 | 9  |
| RE, PE, ND, NC, FC<br>PC, NA, FA, SA, PA, EA | 180        | 60 | 13 | 21 | 2 | 9  |
| FB   | 180        | 60 | 13 | 21 | 2 | 13 |

## Cautions for use

For securing upgraded reliability and safety, consider following caution items.

### 1. Land pattern design

Refer to the recommended land dimensions of each type at flow and reflow solderings.

Avoid placing the chip inductor on any metal pattern except the land because the drop of Q and mutual conductance may occur.

Provisions for venting of flux gases should be made for high density assemblies.

### 2. Mounting

Placement force should not exceed 20N because electric and magnetic characteristics change by applying strong force.

### 3. Soldering

#### (a) Flow soldering

Recommended conditions; 260 °C max., 5sec. max.(total time at 2 waves method)

#### (b) Reflow soldering

##### ① Infra-red reflow soldering

Recommended conditions: 200 °C or high at electrode, 60sec. max. and peak 250 °C max., 5sec. max.

If the solder at the two electrodes are not melt simultaneously, the chip inductor may not be mounted on the right place.

It is recommended to fix by adhesive when the deviation is great.

##### ② VPS reflow soldering

Recommended conditions: 215±5 °C, 20 to 60sec.

### 4. Cleaning

① Do not use acid or alkali agents. Some cleaning solvents out of CFC may damage the products. Confirm the reliability in advance.

② If ultrasonic cleaning is employed, please inform us immediately for technical consultation.

### 5. Instructions for applying current

The rated current is defined as the smaller value of either the current value when the inductance drops 10 % down from the initial point, or the current value when the average temperature of coil inside rises 20 K up from initial point.

Do not operate this coils beyond the specified rated current.

### 6. Storage

① Be careful a high temperature, a large amount of moisture, gases and magnetic field.

② At long storage of more than 1 year, use the products after inspecting the outer structure