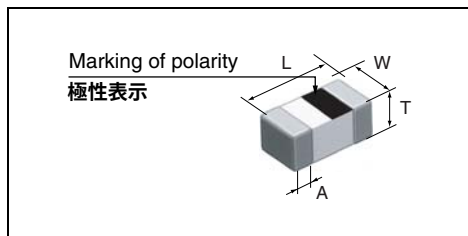


# LLS0603-FH

**Inductance Range:** 1.0~10nH (E-24 Series), 10~100nH (E-12 Series),  
**Temperature Coefficient of L:** +250ppm/°C (for reference only)



| Length<br>L (mm) | Width<br>W (mm) | Thickness<br>T (mm) | Electrode width<br>A (mm) |
|------------------|-----------------|---------------------|---------------------------|
| 0.6 ± 0.03       | 0.3 ± 0.03      | 0.3 ± 0.03          | 0.1 ~ 0.2                 |

- **Marking of polarity:** Marking is on the upper Surface of the unit.
- **極性表示:** 磁束方向を示します。この表示が、常に上を向くようにテーピングされています。

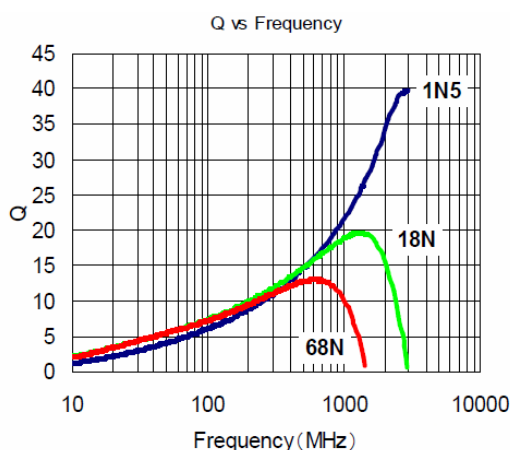
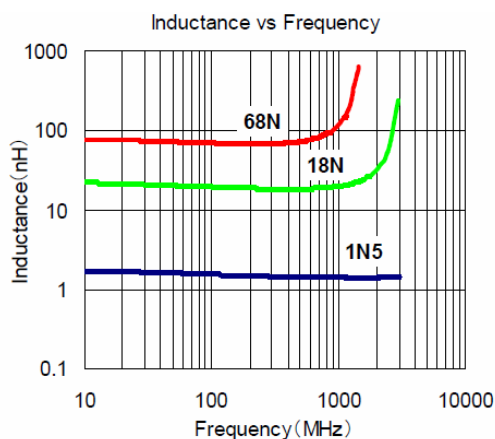
## FEATURES 特長

- Compact and light weight: 0.6×0.3×0.3mm, 0.4mg or less
- Tight tolerance inductance value  
(1~3.9nH±0.1, 0.2, 0.3nH / 4.3~6.2nH±0.2, 0.3nH / 6.8~27nH±3%, 5% / 33~100nH ±5%)
- Expanding Inductance value range (1~100nH)
- RoHS compliant
- 小型・軽量 : 0.6×0.3×0.3mm、重さ : 0.4mg以下
- インダクタンスの狭公差化
- インダクタンス値の範囲の拡大(1~100nH)
- RoHS指令対応

## ELECTRICAL CHARACTERISTICS 電気的特性

- |                                                           |                                                                                                                         |                     |                                                                                                                         |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------|
| • Inductance Range                                        | 1.0~10nH (E-24 Series)<br>10~100nH (E-12 Series)                                                                        | • インダクタンス範囲         | 1.0~10nH (E-24 Series)<br>10~100nH (E-12 Series)                                                                        |
| • Inductance Tolerance                                    | B ; ±0.1nH (1.0~3.9nH)<br>C ; ±0.2nH (1.0~6.2nH)<br>S ; ±0.3nH (1.0~6.2nH)<br>T ; ±3% (6.8~27nH)<br>J ; ±5% (6.8~100nH) | • インダクタンス許容差        | B ; ±0.1nH (1.0~3.9nH)<br>C ; ±0.2nH (1.0~6.2nH)<br>S ; ±0.3nH (1.0~6.2nH)<br>T ; ±3% (6.8~27nH)<br>J ; ±5% (6.8~100nH) |
| • Q (Typical)                                             | 10 (1.0~2.0nH at 500MHz)<br>11~12 (2.2~27nH at 500MHz)                                                                  | • Q (Typical)       | 10 (1.0~2.0nH at 500MHz)<br>11~12 (2.2~27nH at 500MHz)                                                                  |
| • S.R.F. (for reference only)                             | 1.0~13GHz or more                                                                                                       | • 自己共振周波数 (参考値)     | 1.0~13GHz以上                                                                                                             |
| • Rated Current                                           | 50~300mA                                                                                                                | • 許容電流値             | 50~300mA                                                                                                                |
| • Inductance Temperature Coefficient (for reference only) | +250ppm/°C                                                                                                              | • インダクタンス温度係数 (参考値) | +250ppm/°C                                                                                                              |
| • Operating Temperature Range                             | -55°C~+125°C                                                                                                            | • 使用温度範囲            | -55°C~+125°C                                                                                                            |
| • Storage Temperature Range                               | -55°C~+125°C                                                                                                            | • 保存温度範囲            | -55°C~+125°C                                                                                                            |

## EXAMPLES OF CHARACTERISTICS 代表特性例



## TOKO STANDARD PART NUMBERS 東光 標準品一覧

### LLS0603-FH Series (Quantity/reel; 15,000 PCS)

| TOKO<br>Part number | Inductance & Tolerance<br>500MHz | Q<br>Min.<br>500<br>MHz | Q Typical  |            |            |            |             |             |             | S.R.F.<br>(MHz)<br>Min. | R <sub>DC</sub><br>(Ω)<br>Max. | R <sub>DC</sub><br>(Ω)<br>Typ. | I <sub>DC</sub><br>(mA)<br>Max. |
|---------------------|----------------------------------|-------------------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------------------|--------------------------------|--------------------------------|---------------------------------|
|                     |                                  |                         | 100<br>MHz | 300<br>MHz | 500<br>MHz | 800<br>MHz | 1000<br>MHz | 1800<br>MHz | 2400<br>MHz |                         |                                |                                |                                 |
| LLS0603-FH1N0C      | 1.0 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 14.0       | 19.0       | 22.0        | 31.0        | 38.0        | 13000                   | 0.14                           | 0.08                           | 300                             |
| LLS0603-FH1N1C      | 1.1 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 14.0       | 19.0       | 22.0        | 31.0        | 38.0        | 13000                   | 0.14                           | 0.10                           | 300                             |
| LLS0603-FH1N2C      | 1.2 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 14.0       | 19.0       | 22.0        | 31.0        | 38.0        | 13000                   | 0.14                           | 0.10                           | 300                             |
| LLS0603-FH1N3C      | 1.3 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 14.0       | 19.0       | 22.0        | 31.0        | 38.0        | 13000                   | 0.14                           | 0.10                           | 300                             |
| LLS0603-FH1N5C      | 1.5 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 14.0       | 18.0       | 22.0        | 31.0        | 38.0        | 11000                   | 0.16                           | 0.10                           | 300                             |
| LLS0603-FH1N6C      | 1.6 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 14.0       | 19.0       | 22.0        | 31.0        | 37.0        | 8500                    | 0.16                           | 0.10                           | 300                             |
| LLS0603-FH1N8C      | 1.8 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 15.0       | 19.0       | 22.0        | 31.0        | 37.0        | 8500                    | 0.18                           | 0.10                           | 300                             |
| LLS0603-FH2N0C      | 2.0 / B, C, S                    | 10.0                    | 6.0        | 11.0       | 15.0       | 19.0       | 22.0        | 31.0        | 37.0        | 8500                    | 0.18                           | 0.10                           | 250                             |
| LLS0603-FH2N2C      | 2.2 / B, C, S                    | 11.0                    | 6.0        | 11.0       | 15.0       | 19.0       | 22.0        | 31.0        | 37.0        | 8500                    | 0.20                           | 0.15                           | 250                             |
| LLS0603-FH2N4C      | 2.4 / B, C, S                    | 11.0                    | 7.0        | 12.0       | 15.0       | 20.0       | 23.0        | 32.0        | 37.0        | 7000                    | 0.20                           | 0.15                           | 250                             |
| LLS0603-FH2N7C      | 2.7 / B, C, S                    | 11.0                    | 7.0        | 12.0       | 15.0       | 20.0       | 23.0        | 32.0        | 38.0        | 6000                    | 0.20                           | 0.15                           | 250                             |
| LLS0603-FH3N0C      | 3.0 / B, C, S                    | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 38.0        | 5000                    | 0.25                           | 0.15                           | 250                             |
| LLS0603-FH3N3C      | 3.3 / B, C, S                    | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 38.0        | 5000                    | 0.25                           | 0.15                           | 250                             |
| LLS0603-FH3N6C      | 3.6 / B, C, S                    | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 38.0        | 5000                    | 0.28                           | 0.15                           | 250                             |
| LLS0603-FH3N9C      | 3.9 / B, C, S                    | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 38.0        | 5000                    | 0.28                           | 0.20                           | 250                             |
| LLS0603-FH4N3C      | 4.3 / C, S                       | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 37.0        | 4000                    | 0.30                           | 0.20                           | 250                             |
| LLS0603-FH4N7C      | 4.7 / C, S                       | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 36.0        | 4000                    | 0.30                           | 0.20                           | 250                             |
| LLS0603-FH5N1C      | 5.1 / C, S                       | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 23.0        | 32.0        | 35.0        | 4000                    | 0.35                           | 0.25                           | 220                             |
| LLS0603-FH5N6C      | 5.6 / C, S                       | 11.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 22.0        | 31.0        | 34.0        | 4000                    | 0.35                           | 0.25                           | 220                             |
| LLS0603-FH6N2C      | 6.2 / C, S                       | 12.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 22.0        | 31.0        | 34.0        | 3500                    | 0.35                           | 0.25                           | 220                             |
| LLS0603-FH6N8J      | 6.8nH / T, J                     | 12.0                    | 7.0        | 12.0       | 16.0       | 20.0       | 22.0        | 30.0        | 33.0        | 3500                    | 0.40                           | 0.30                           | 220                             |
| LLS0603-FH7N5J      | 7.5nH / T, J                     | 12.0                    | 8.0        | 12.0       | 16.0       | 20.0       | 22.0        | 30.0        | 32.0        | 3000                    | 0.50                           | 0.30                           | 220                             |
| LLS0603-FH8N2J      | 8.2nH / T, J                     | 12.0                    | 8.0        | 12.0       | 16.0       | 20.0       | 22.0        | 29.0        | 30.0        | 3000                    | 0.60                           | 0.30                           | 220                             |
| LLS0603-FH9N1J      | 9.1nH / T, J                     | 12.0                    | 8.0        | 12.0       | 16.0       | 20.0       | 23.0        | 29.0        | 28.0        | 2500                    | 0.65                           | 0.35                           | 220                             |
| LLS0603-FH10NJ      | 10nH / T, J                      | 12.0                    | 8.0        | 12.0       | 16.0       | 20.0       | 23.0        | 28.0        | 27.0        | 2500                    | 0.70                           | 0.40                           | 220                             |
| LLS0603-FH12NJ      | 12nH / T, J                      | 11.0                    | 8.0        | 13.0       | 16.0       | 21.0       | 23.0        | 27.0        | 25.0        | 2500                    | 0.70                           | 0.40                           | 180                             |
| LLS0603-FH15NJ      | 15nH / T, J                      | 11.0                    | 8.0        | 13.0       | 16.0       | 20.0       | 22.0        | 24.0        | 18.0        | 2000                    | 0.80                           | 0.45                           | 180                             |
| LLS0603-FH18NJ      | 18nH / T, J                      | 11.0                    | 8.0        | 13.0       | 16.0       | 19.0       | 21.0        | 21.0        | 13.0        | 2000                    | 0.85                           | 0.50                           | 150                             |
| LLS0603-FH22NJ      | 22nH / T, J                      | 11.0                    | 8.0        | 14.0       | 17.0       | 20.0       | 22.0        | 22.0        | -           | 2000                    | 1.70                           | 1.30                           | 100                             |
| LLS0603-FH27NJ      | 27nH / T, J                      | 11.0                    | 8.0        | 14.0       | 17.0       | 20.0       | 21.0        | -           | -           | 1700                    | 1.80                           | 1.40                           | 50                              |
| LLS0603-FH33NJ      | 33nH / J                         | 9.0                     | 8.0        | 14.0       | 17.0       | 19.0       | 20.0        | -           | -           | 1400                    | 2.00                           | 1.55                           | 50                              |
| LLS0603-FH39NJ      | 39nH / J                         | 9.0                     | 8.0        | 11.0       | 13.0       | 14.0       | 14.0        | -           | -           | 1300                    | 2.20                           | 1.55                           | 50                              |
| LLS0603-FH47NJ      | 47nH / J                         | 9.0                     | 8.0        | 11.0       | 13.0       | 14.0       | 13.0        | -           | -           | 1100                    | 2.30                           | 1.60                           | 50                              |
| LLS0603-FH56NJ      | 56nH / J                         | 9.0                     | 8.0        | 11.0       | 13.0       | 13.0       | 12.0        | -           | -           | 1000                    | 2.70                           | 1.85                           | 50                              |
| LLS0603-FH68NJ      | 68nH / J                         | 9.0                     | 8.0        | 11.0       | 13.0       | 13.0       | 10.0        | -           | -           | 1000                    | 3.20                           | 2.15                           | 50                              |
| LLS0603-FH82NJ      | 82nH / J                         | 9.0                     | 8.0        | 11.0       | 13.0       | 11.0       | 8.0         | -           | -           | 1000                    | 3.70                           | 2.45                           | 50                              |
| LLS0603-FHR10J      | 100nH / J                        | 9.0                     | 8.0        | 11.0       | 12.0       | 9.0        | 5.0         | -           | -           | 900                     | 4.20                           | 2.80                           | 50                              |

Tolerance part number : B;  $\pm 0.1\text{nH}$  (1.0~3.9nH), C;  $\pm 0.2\text{nH}$ , S;  $\pm 0.3\text{nH}$  (1.0~6.2nH)  
T;  $\pm 3\%$  (6.8~27nH), J;  $\pm 5\%$  (6.8~100nH)

#### ●Test Equipment & note

(測定器／注意事項)

- L, Q : RF Impedance Analyzer 4291A/B (Agilent Technologies), Test Fixture 16196C (Agilent Technologies)
- Q at 2400MHz : RF Impedance Analyzer E4991A (Agilent Technologies), Test Fixture 16196C (Agilent Technologies)
- S.R.F. / 自己共振周波数 : Network Analyzer 8719D, 8720D (Agilent Technologies)
- R<sub>DC</sub> / 直流抵抗 : Milliohmmeter 4338A/B (Agilent Technologies)
- Operating temperature range / 使用温度範囲 : -55°C~+125°C
- Storage temperature range / 保存温度範囲 : -55°C~+125°C