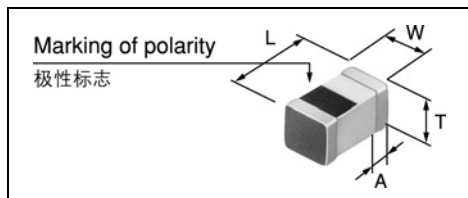


LL1005-FHL

Inductance Range: 1.0~100nH (E-24 Series)、特殊对应品 order production available (1.1nH, 1.3nH, 1.6nH, 2.0nH, 2.4nH, 3.0nH, 3.6nH, 4.3nH, 5.1nH, 6.2nH, 7.5nH, 9.1nH)

Temperature Coefficient of L: +250ppm/°C (for reference only)



Inductance	Length L (mm)	Width W (mm)	Thickness T (mm)	Electrode width A (mm)
1.0 ~ 68nH	1.0 ± 0.05	0.5 ± 0.05	0.5 ± 0.05	0.25 ± 0.1
82 ~ 100nH	1.0 ± 0.05	0.5 ± 0.05	0.5 ± 0.1	0.25 ± 0.1

- **Marking of polarity:** Marking is on the upper Surface of the unit.
- **极性标志:** 标志在单元上部表面。

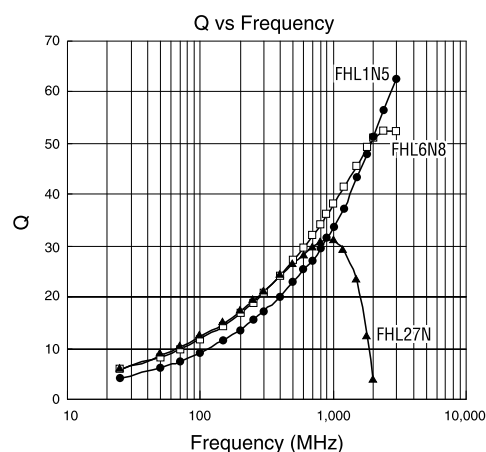
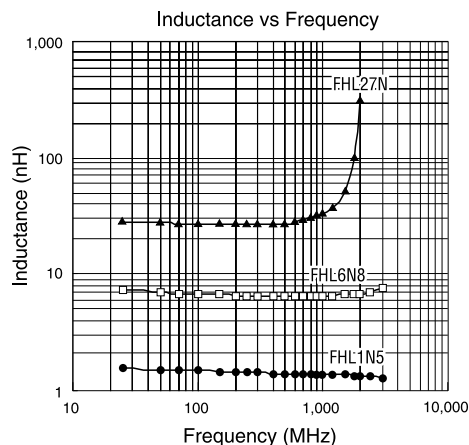
FEATURES 特点

- Dual frequency standard for inductance value
- Tight tolerance physical dimensions (±0.05mm)
- Supports high temperature reflow soldering (260°C, 3 times)
- Expanding operating temperature range (-55°C~+125°C)
- Extended applicable frequency range (~10GHz)
- Surface mounting applicability (Supports reflow soldering)
- High reliability (ceramic integrated structure, and terminals plated)
- RoHS compliant
- 针对电感值的双频率标准
- 缩小物理尺寸公差 (±0.05毫米)
- 支持高温回流焊接 (260°C, 3次)
- 扩展工作温度范围 (-55°C ~ +125°C)
- 扩展适用的频率范围 (~10GHz)
- 表面贴装设备适用性 (支持回流焊接)
- 可靠性高 (陶瓷制品混合结构, 以及电镀电极)
- 符合RoHS指令

ELECTRICAL CHARACTERISTICS 电气特性

- | | | | |
|--|---|-------------------|---|
| • Inductance Range | 1.0~100nH (E-24 Series) | • 电感值范围 | 1.0~100nH (E-24系列) |
| • Inductance Tolerance | S ; ± 0.3nH (1.0~6.2nH)
J ; ± 5% (6.8~100nH) | • 电感值公差 | S级; ±0.3nH (1.0~6.2nH)
J级; ±5% (6.8~100nH) |
| • Q (Typical) | 15~35 (at 800MHz) | • Q (典型) | 15~35 (在800MHz情况下) |
| • Rated Current | 200~500mA | • 额定电流值 | 200~500mA |
| • Inductance Temperature Coefficient
(for reference only) | +250ppm/°C | • 电感的感应温度系数(仅供参考) | +250ppm/°C |
| • Operating Temperature Range | -55°C~+125°C | • 使用温度范围 | -55°C~+125°C |
| • Storage Temperature Range | -55°C~+125°C | • 储存温度范围 | -55°C~+125°C |

EXAMPLES OF CHARACTERISTICS 特性范例



continued on next page 接下页

TOKO STANDARD PART NUMBERS 东光标准零件号码

LL1005-FHL Series (Quantity/reel; 10,000 PCS)

TOKO Part number	Inductance & Tolerance		Q Min. 100 MHz	Q Typical							S.R.F. (MHz) Min.	R _{DC} (Ω) Max.	R _{DC} (Ω) Typ.	I _{DC} (mA) Max.
	100MHz	800MHz (**500MHz)		100 MHz	300 MHz	500 MHz	800 MHz	1000 MHz	1800 MHz	2400 MHz				
LL1005-FHL1N0S	1.0±0.3nH	0.93±0.5nH	8.0	8.8	17.0	22.0	29.0	33.0	47.0	57.0	20000	0.10	0.07	500
* LL1005-FHL1N1S	1.1±0.3nH	1.0±0.5nH	8.0	9.0	16.0	21.0	27.0	30.0	43.0	53.0	16000	0.10	0.07	500
LL1005-FHL1N2S	1.2±0.3nH	1.1±0.5nH	8.0	9.0	17.0	22.0	28.0	32.0	46.0	55.0	16000	0.10	0.07	500
* LL1005-FHL1N3S	1.3±0.3nH	1.2±0.5nH	8.0	9.0	17.0	22.0	28.0	32.0	45.0	54.0	12000	0.11	0.07	500
LL1005-FHL1N5S	1.5±0.3nH	1.4±0.5nH	8.0	9.2	17.0	23.0	29.0	33.0	47.0	57.0	12000	0.13	0.08	500
* LL1005-FHL1N6S	1.6±0.3nH	1.5±0.5nH	8.0	10.0	17.0	23.0	29.0	33.0	46.0	55.0	12000	0.13	0.08	500
LL1005-FHL1N8S	1.8±0.3nH	1.7±0.5nH	8.0	9.1	16.0	22.0	28.0	32.0	44.0	53.0	12000	0.14	0.08	500
* LL1005-FHL2N0S	2.0±0.3nH	1.9±0.5nH	8.0	10.0	18.0	23.0	30.0	34.0	46.0	53.0	11000	0.14	0.08	500
LL1005-FHL2N2S	2.2±0.3nH	2.0±0.5nH	8.0	10.0	18.0	24.0	31.0	34.0	48.0	55.0	11000	0.15	0.09	500
* LL1005-FHL2N4S	2.4±0.3nH	2.2±0.5nH	8.0	11.0	18.0	24.0	31.0	35.0	49.0	54.0	8100	0.15	0.09	500
LL1005-FHL2N7S	2.7±0.3nH	2.5±0.5nH	8.0	10.0	18.0	24.0	31.0	35.0	50.0	58.0	8100	0.15	0.10	500
* LL1005-FHL3N0S	3.0±0.3nH	2.9±0.5nH	8.0	10.0	18.0	24.0	31.0	35.0	49.0	54.0	7700	0.15	0.10	500
LL1005-FHL3N3S	3.3±0.3nH	3.1±0.5nH	8.0	10.0	18.0	24.0	30.0	34.0	47.0	54.0	7700	0.16	0.10	500
* LL1005-FHL3N6S	3.6±0.3nH	3.4±0.5nH	8.0	10.0	18.0	24.0	30.0	34.0	46.0	52.0	6200	0.16	0.11	500
LL1005-FHL3N9S	3.9±0.3nH	3.7±0.5nH	8.0	10.0	18.0	24.0	31.0	36.0	48.0	55.0	6200	0.18	0.12	500
* LL1005-FHL4N3S	4.3±0.3nH	4.1±0.5nH	8.0	10.0	18.0	24.0	30.0	34.0	46.0	50.0	6000	0.18	0.12	400
LL1005-FHL4N7S	4.7±0.3nH	4.4±0.5nH	9.0	11.0	19.0	24.0	31.0	35.0	47.0	52.0	6000	0.20	0.13	400
* LL1005-FHL5N1S	5.1±0.3nH	4.8±0.5nH	9.0	11.0	19.0	25.0	31.0	35.0	45.0	49.0	5300	0.20	0.14	400
LL1005-FHL5N6S	5.6±0.3nH	5.3±0.5nH	9.0	12.0	21.0	27.0	35.0	39.0	50.0	53.0	5100	0.22	0.15	400
* LL1005-FHL6N2S	6.2±0.3nH	6.0±0.5nH	9.0	12.0	21.0	27.0	34.0	38.0	50.0	54.0	4700	0.22	0.15	400
LL1005-FHL6N8J	6.8nH±5%	6.5nH±10%	9.0	12.0	21.0	27.0	34.0	38.0	49.0	52.0	4700	0.23	0.16	400
* LL1005-FHL7N5J	7.5nH±5%	7.3nH±10%	9.0	12.0	21.0	27.0	34.0	38.0	46.0	46.0	4200	0.23	0.16	400
LL1005-FHL8N2J	8.2nH±5%	7.9nH±10%	9.0	12.0	21.0	27.0	33.0	37.0	46.0	46.0	4000	0.25	0.17	400
* LL1005-FHL9N1J	9.1nH±5%	8.9nH±10%	9.0	11.0	19.0	25.0	31.0	34.0	40.0	36.0	3600	0.26	0.18	400
LL1005-FHL10NJ	10nH±5%	9.7nH±10%	9.0	12.0	20.0	26.0	33.0	36.0	43.0	39.0	3600	0.30	0.19	400
LL1005-FHL12NJ	12nH±5%	12nH±10%	9.0	12.0	20.0	25.0	31.0	33.0	33.0	23.0	2800	0.40	0.21	300
LL1005-FHL15NJ	15nH±5%	15nH±10%	9.0	12.0	20.0	25.0	30.0	32.0	27.0	-	2500	0.50	0.26	300
LL1005-FHL18NJ	18nH±5%	18nH±10%	10.0	12.0	21.0	26.0	31.0	33.0	27.0	-	2300	0.60	0.44	300
LL1005-FHL22NJ	22nH±5%	23nH±10%	10.0	12.0	20.0	25.0	30.0	31.0	18.0	-	2100	0.70	0.50	300
LL1005-FHL27NJ	27nH±5%	30nH±10%	10.0	12.0	21.0	26.0	31.0	31.0	12.0	-	1700	0.85	0.52	300
LL1005-FHL33NJ	33nH±5%	36nH±10%	10.0	12.0	19.0	24.0	27.0	27.0	-	-	1700	1.00	0.70	200
LL1005-FHL39NJ	39nH±5%	44nH±10%	10.0	12.0	20.0	24.0	26.0	26.0	-	-	1600	1.10	0.80	200
LL1005-FHL47NJ	47nH±5%	**50nH±10%	10.0	11.0	18.0	21.0	21.0	18.0	-	-	1200	1.30	0.93	200
LL1005-FHL56NJ	56nH±5%	**60nH±10%	10.0	12.0	19.0	22.0	20.0	16.0	-	-	1100	1.50	1.20	200
LL1005-FHL68NJ	68nH±5%	**77nH±10%	10.0	11.0	18.0	20.0	18.0	13.0	-	-	1100	1.70	1.25	200
LL1005-FHL82NJ	82nH±5%	**95nH±10%	10.0	13.0	20.0	21.0	15.0	-	-	-	970	1.90	1.26	200
LL1005-FHLR10J	100nH±5%	**122nH±10%	10.0	13.0	19.0	19.0	-	-	-	-	870	2.20	1.45	200

Note : (1)Add tolerance to part number; B=±0.1nH, C=±0.2nH, G=±2%, T=±3%

(2)* Sign shows the order production product number. Please demand each product number because it is not a regular product number of the sample kit.

(3)Please be sure that carefully discuss your planned purchase with our sales division if you intend to use the automotive products for LL1005-FHL82NJ and LL1005-FHLR10J.

注 : (1) 添加公差至品号; B = ±0.1nH, C = ±0.2nH, G±2%, T±3%

(2)*标记表示订购生产的产品编号。请查询每种产品编号, 因为原有产品编号并非样品组的恒用产品编号。

(3) 如果您准备使用LL1005-FHL82NJ和LL1005-FHLR10J在车载产品上时, 请务必事前与我们的销售人员咨询联系。

●Test Equipment & note

(测试设备和注意事项)

- L, Q : RF Impedance Analyzer 4291A/B (Agilent Technologies), Test Fixture 16192A (Agilent Technologies)
- Q at 2400MHz : RF Impedance Analyzer E4991A (Agilent Technologies), Test Fixture 16192A (Agilent Technologies)
- S.R.F./自谐振频率 : Network Analyzer 8719D (Agilent Technologies), 8720D (Agilent Technologies)
- R_{DC}/直流电阻 : Milliohmeter 4338A/B (Agilent Technologies)
- Inductance tolerance/电感值公差 : S=±0.3nH, J=±5%
- Operating temperature range/工作温度范围 : -55°C ~ +125°C
- Storage temperature range/储存温度范围 : -55°C ~ +125°C