

HPL, TFL series, high-precision, thin-film chip inductors.



These 0805, 0402 and 0201 size chip inductors are adjustment free due to their tight tolerance. Additionally, this part also offers a high self-resonance frequency of 1 GHz and high Q value and a very excellent rated current.

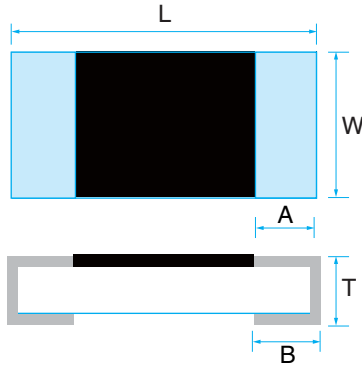
RoHS compliant

Completely lead free



SPECIFICATIONS

Mechanical



| Dimension (Inch Size) | HPL0603 (0201) | HPL1005 (0402) | TFL0816 (0603) |
|-----------------------|----------------|----------------|----------------|
| L | 0.60±0.05 | 1.00±0.10 | 1.60±0.10 |
| W | 0.30±0.05 | 0.50±0.10 | 0.80±0.10 |
| A | 0.07±0.05 | 0.15±0.10 | 0.30±0.20 |
| B | 0.12±0.05 | 0.25±0.10 | 0.30±0.20 |
| T | 0.28±0.05 | 0.40±0.10 | 0.45±0.10 |

(unit : mm)

Electrical

| Type | HPL0603 | | HPL1005 | | TFL0816 | | | | |
|-------------------------------|----------------|----------|----------------|----------|---------------|---------|---------|----------|----------|
| inductance value | E-24 | | E-24 | | E-12 | | | | |
| inductance range (nH) | 1.0~5.6 | 6.2~27 | 1.0~9.1 | 10~39 | 1.0~4.7 | 5.6~8.2 | 10~27 | 33~68 | 82~100 |
| inductance tolerance | ±0.1nH, ±0.2nH | ±2% | ±0.1nH, ±0.2nH | ±2% | ±0.2nH | | ±2% | ±2% | |
| Q value (at 300MHz) | 10 | 8~10 | 20~15 | 15~13 | 20 | 15 | 15 | *15 | *10 |
| Q value (at 800MHz) typ. | 14~17 | 14~16 | 35~25 | 25~20 | 34~30 | | 30~25 | 25 | 15 |
| Q value (at 1.5GHz) typ. | 18~25 | 18~20 | 50~30 | 30~25 | 38~35 | | 35~30 | ** | |
| Self resonance Frequency(GHz) | 10~6.0 | 3.5 | 7.0~4.0 | 3.5 | 6.0~5.0 | 5.0~4.0 | 4.0~2.0 | 1.5~1.0 | 1.0 |
| DC resistance(Ω) | 0.1~0.8 | 0.8~1.5 | 0.01~0.4 | 0.5~0.8 | 0.10~0.25 | 0.50 | 1.0~2.0 | 2.0~4.5 | 6.0~8.5 |
| Rated Current(A) | 0.5~0.2 | 0.2~0.15 | 1.8~0.34 | 0.3~0.24 | 1.0~0.6 | 0.40 | 0.3~0.2 | 0.2~0.14 | 0.12~0.1 |
| Package | 10,000pcs/reel | | | | 5,000pcs/reel | | | | |

Measured at 500MHz in case of HPL0603, at 300MHz in case of HPL1005

* Measured at 200MHz in case of 33-100nH(TFL0816)

** No measuring in case of 33-100nH(TFL0816)



PART NUMBER

HPL 0603 - 1N0 (-E02)

