

Precision thin film chip inductors

HPL series

Features

- Highly precise chip inductors: inductance tolerance +/-0.1nH for 0603 size
- High Q and high current
- Small temperature coefficient of inductance: 0 to -200ppm/°C

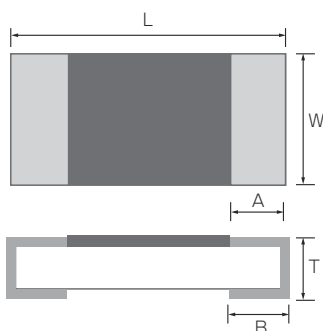
Applications

- Automotive electronics, high frequency circuitries such as wireless communication devices and base stations

Specifications

*All made to order.

Dimensions



unit : mm

Dimension (inch)	HPL0603 (0201)	HPL1005 (0402)
L	0.60±0.05	1.00±0.10
W	0.30±0.05	0.50±0.10
A	0.07±0.05	0.15±0.15
B	0.12±0.05	0.25±0.20
T	0.28±0.05	0.40±0.10

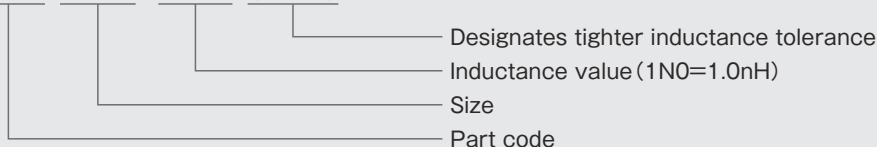
Electrical characteristics

Series name	HPL0603		HPL1005		
Inductance range	1.0~5.6	6.2~10	1.0~9.1	10~18	
Inductance tolerance	±0.1nH(E02)	○	○	—	
	±0.2nH	○	○	—	
	±2%	—	○	○	
Inductance value offered	E-24				
Q value	at 300MHz	—	—	20~15	15~13
	at 500MHz	10	10~8	—	—
	at 800MHz	17~14	16~14	35~25	25~20
	at 1.5GHz	25~18	20~18	50~30	30~25
Self-resonance frequency (GHz)	10~6.0	3.5	7.0~4.0	3.5	
DC resistance (Ω) typ.	0.1~0.8	0.8~1.5	0.01~0.4	0.5~0.8	
Rated current (A)	0.5~0.2	0.2~0.15	1.8~0.34	0.3~0.24	
Operating temperature	-40~125°C				
Packaging	10,000pcs	○	○	○	

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

Part numbering system

HPL 1005 - 1N0 (-E02)



High frequency surface mount components

HPL series