

HPL series, High-Q, high-current thin film chip inductors

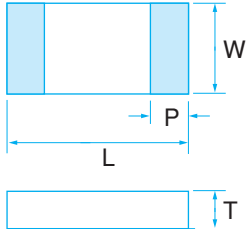


Thin-film chip inductor with high Q value and high rated current
An excellent inductance tolerance of $\pm 0.1\text{nH}$



FEATURES

Mechanical



Dimension	HPL0603 (0201)	HPL1005 (0402)
L	0.60 ± 0.05	1.00 ± 0.10
W	0.30 ± 0.05	0.50 ± 0.10
P	0.07 ± 0.05	0.15 ± 0.10
T	0.28 ± 0.05	0.40 ± 0.10

Equivalent circuit



Electrical

Type	HPL0603		HPL1005	
	E-12		E-24	
inductance value				
inductance range (nH)	1.0~5.6	6.8~10	1.0~9.1	10~18
inductance tolerance	$\pm 0.2\text{nH}$	$\pm 5\%$	$\pm 0.1\text{nH}, \pm 0.2\text{nH}$	$\pm 2\%, \pm 5\%$
Q value (at 300MHz)	10	8~10	20~15	15~13
Q value (at 800MHz) typ.	14~17	14~16	35~25	25~20
Q value (at 1.5GHz) typ.	18~25	18~20	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	0~5.6	1.8~0.34	0.3~0.24
Package	10,000 pcs/reel			

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



PART NUMBER

HPL 0603 - 1N0 (-E02)

