

Thin Film Chip Inductors

TFL Series

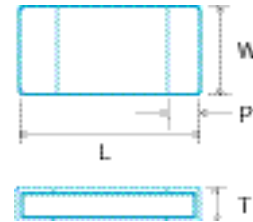
1.0 Description

These 0603 and 0402 size chip inductors are adjustment free due to their tight tolerance. Additionally, this part also offers a high self-resonance frequency of 1GHz and a very excellent rated current. The package size and dimensions make it very similar to the chip resistor products.

2.0 Mechanical

dimension mm

Dimension (mm)	TFL0306(0201)	TFL0510 (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
P	0.08±0.05	0.15 ± 0.10	0.30 ± 0.20
T	0.35 max	0.40 ± 0.10	0.45 ± 0.10



schematic



3.0 Electrical

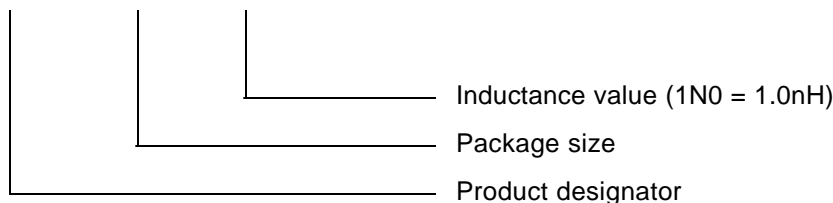
Type	TFL0510 (0402)					TFL0816 (0603)					
	E-24					E-12					
Inductance range	1.0-1.2	1.3-2.2	2.4-3.9	4.9-9.1	10-15	18-39	1.0-4.7	5.6-8.2	10-27	33-68	82-100
Inductance range (nH)											
Inductance tolerance	±0.1nH, ±0.2nH		±0.2nH		±2%	±3, ±5%	±0.2nH		±2%	±2%	
Q min.Meas.frequency 300mHz	10				*10		20	15	15	*15	*10
Typical Meas.frequency800mHz	21					34-30		30-25	25	15	
Typical Meas.frequency1.5GHz	25		25-20	20	**20	38-35		35-30	**		
Self resistance frequency(GHz)min	7.0		5.5-4.0	4.0	2.0-1.5	6.0-5.0	5.0-4.0	4.0-2.0	1.5-1.0	1.0	
DC resistance (ohm) max	0.1	0.15-0.20	0.20-0.40	0.60-1.50	1.50-2.55	2.55-4.00	0.100-0.25	0.50	1.0-2.0	2.0-4.5	6.0-8.5
Rated current (A)	1.2	0.93-0.60	0.58-0.42	0.34-0.21	0.21-0.16	0.16-0.12	1.006	0.40	0.3-0.2	0.2-0.14	0.12-0.1

* Measured at 200MHz in case of 33, 36, 39nH(TFL0510) and 33-100nH(TFL0816)

** No measurement in case of 33, 36 and 39nH(TFL0510) and 33-100nH(TFL0816)

4.0 Part Number

TFL 0816 - 1N0




Manufacturer(s) of the products described on this page are indicated by their respective logos.