

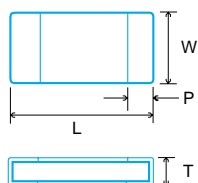
# Thin Film Chip Inductors

## TFL Series

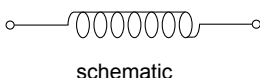
### 1.0 Description

These 0805 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	TFL0510 (0402)	TFL0816 (0603)
L	1.00 ± 0.10	1.60 ± 0.10
W	0.50 ± 0.10	0.80 ± 0.10
P	0.15 ± 0.10	0.30 ± 0.20
T	0.40 ± 0.10	0.45 ± 0.10

### 3.0 Electrical

Type	TFL0510 (0402)						TFL0816 (0603)				
Inductance range	E-24						E-12				
Inductance range (nH)	1.0-1.2	1.3-2.2	2.4-3.9	4.9-9.1	10-16	18-39	1.0-4.7	5.6-8.2	10-27	33-68	82-100
Inductance tolerance	±0.1 nH, ±0.2 nH		±0.2 nH	±2%	±3%		±0.2nH	±2%	±2%		
Q min.Meas.frequency 300mHz	10				*10		20	15	15	*15	*10
Typical Meas.frequency 800mHz	21						34-30	30-25	25	15	
Typical Meas.frequency 1.5GHz	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	0.10-0.25	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	1.0-0.6	0.40	0.3 - 0.2	0.2 - 0.14	0.12 - 0.1
Packages	10,000 pcs./reel						5,000 pcs./reel				

\* 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** ————— Product designator  
**0816** ————— Package size  
**-1N0** ————— Inductance value (1N0 = 1.0 nH)  
**(-ME6)** ————— Inductance tolerance value ±0.1nH





JQA-2755



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