

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

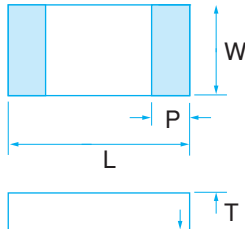


An excellent inductance tolerance of  $\pm 0.1\text{nH}$  and thickness of  $0.4\pm 0.1\text{mm}$ . Self-resonance frequencies of more than 1GHz and temperature coefficient of inductance from 0 to +200ppm/ $^{\circ}\text{C}$  are available. Our SMD components contribute to lead-free composition of electronics products.



## SPECIFICATIONS

### Mechanical



Dimension	TFL0510 (0402)	TFL0816 (0805)
L	1.00 $\pm$ 0.10	1.60 $\pm$ 0.10
W	0.50 $\pm$ 0.10	0.80 $\pm$ 0.10
P	0.15 $\pm$ 0.10	0.30 $\pm$ 0.20
T	0.40 $\pm$ 0.10	0.45 $\pm$ 0.10

### Equivalent circuit



### Electrical

Type	TFL0510						TFL0816				
	E-24						E-12				
inductance value											
inductance range (nH)	1.0~1.2	1.3~2.2	2.4~3.9	4.3~9.1	10~16	18~39	1.0~4.7	5.6~8.2	10~27	33~68	82~100
inductance tolerance	$\pm 0.1\text{nH}$		$\pm 0.2\text{nH}$		$\pm 2\%$	$\pm 3\%$	$\pm 0.2\text{nH}$		$\pm 2\%$	$\pm 2\%$	
Q value (at 300MHz)	10					*10	20	15	15	*15	*10
Q value (at 800MHz) typ.	21						34~30		30~25	25	15
Q value (at 1.5GHz) typ.	25		25~20	20	**20	38~35		35~30	**		
Self resonance Frequency(GHz)	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( $\Omega$ )	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
Package	10,000pcs/reel						5,000pcs/reel				

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

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



## PART NUMBER

**TFL 0816 - 1N0 (-ME6)**

- \_\_\_\_\_ Inductance tolerance value  $\pm 0.1\text{nH}$
- \_\_\_\_\_ Inductance value
- \_\_\_\_\_ Dimensions
- \_\_\_\_\_ Part Code