



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

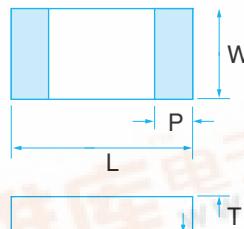
**SSM**  
THIN FILM TECHNOLOGY

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  $1\text{GHz}$  and temperature coefficient of inductance from 0 to  $+200\text{ppm}/^\circ\text{C}$  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	$0.40 \pm 0.10$	$0.45 \pm 0.10$

#### Electrical

#### Equivalent circuit



Type	TFL0510						TFL0816					
inductance value	E-24						E-12					
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 - 1NO (-ME6)**

Inductance tolerance value  $\pm 0.1\text{nH}$

Inductance value

Dimensions

Part Code