



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

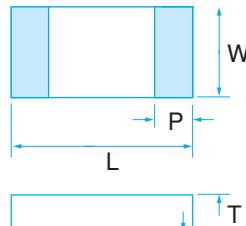
SSM
THIN FILM TECHNOLOGY

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 1GHz 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 ± 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

Equivalent circuit



Electrical

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(Ω)	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