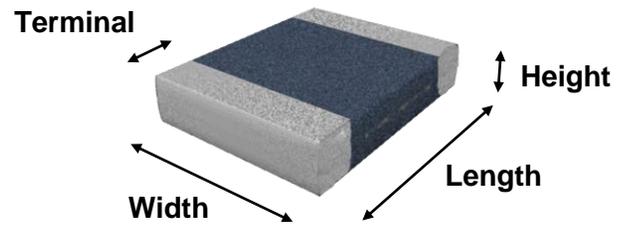


TDK Thin Film Power inductor TFM201610ALC-TAA series

FEATURES

- The thickness of this product is 1.0mm,and it is very thin compared with other same kind of products.
- This product consists of original fine copper pattern with micro-processing technology .
- The coil pattern is coated with metal magnetic material.
- Superior DC-Bias characteristics .
- This product corresponds to ROHS.

PRODUCTS SHAPE



APPLICATIONS

- Generic use for DC/DC Converter of portable device.
- Used for Smart phone, Feature phone, HDD, SSD, etc.

DIMENSIONS

	Length ±0.2 [mm]	Width ±0.2 [mm]	Height Max. [mm]	Terminal Ref. [mm]
TFM201610	2.0	1.6	1.0	0.5

OPERATING TEMPERATURE RANGE

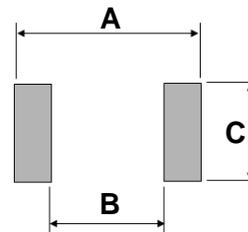
-40 ~ 125 deg.C
(Include self temperature rise 40 deg.C)

PRODUCT IDENTIFICATIONS

TFM 2016 10 ALC – 1R0 M TAA
(1) (2) (3) (4) (5) (6) (7)

- (1) Series name
- (2) Product size (Length , Width)
- (3) Product height
- (4) Product identification
- (5) Inductance value (1R0 : 1.0μH)
- (6) Inductance tolerance (M : ±20%)
- (7) Control mark

RECOMMENDED LAND PATTERN



	A [mm]	B [mm]	C [mm]
TFM201610	2.4	1.2	1.6

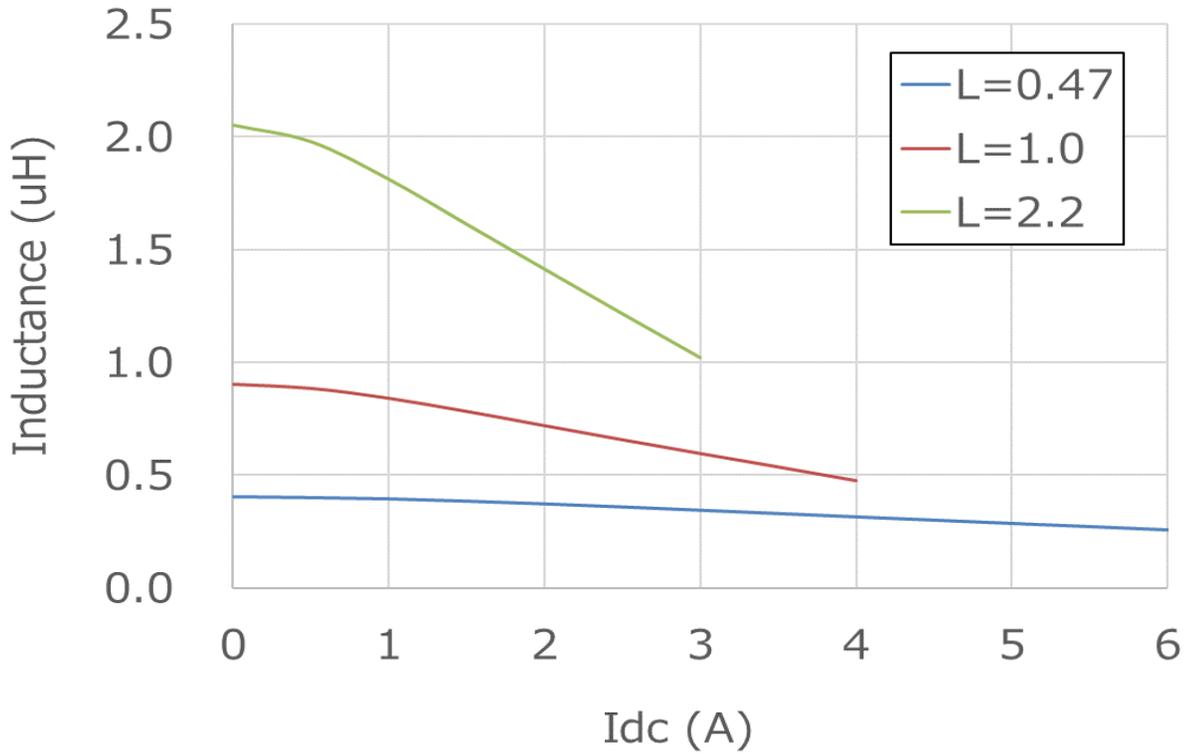
ELECTRICAL CHARACTERISTICS

Identification	Inductance [μH]	Test frequency [MHz]	DC Resistance [mOhm]		Isat [A]		Itemp [A]	
			Max	Typ.	Max	Typ.	Max	Typ.
TFM201610ALC-R47MTAA	0.47 +/-20%	1.0	25	20	5.1	5.2	4.9	5.2
TFM201610ALC-1R0MTAA	1.0 +/-20%	1.0	47	43	3.0	3.3	3.4	3.6
TFM201610ALC-2R2MTAA	2.2 +/-20%	1.0	102	92	1.7	1.9	2.3	2.5

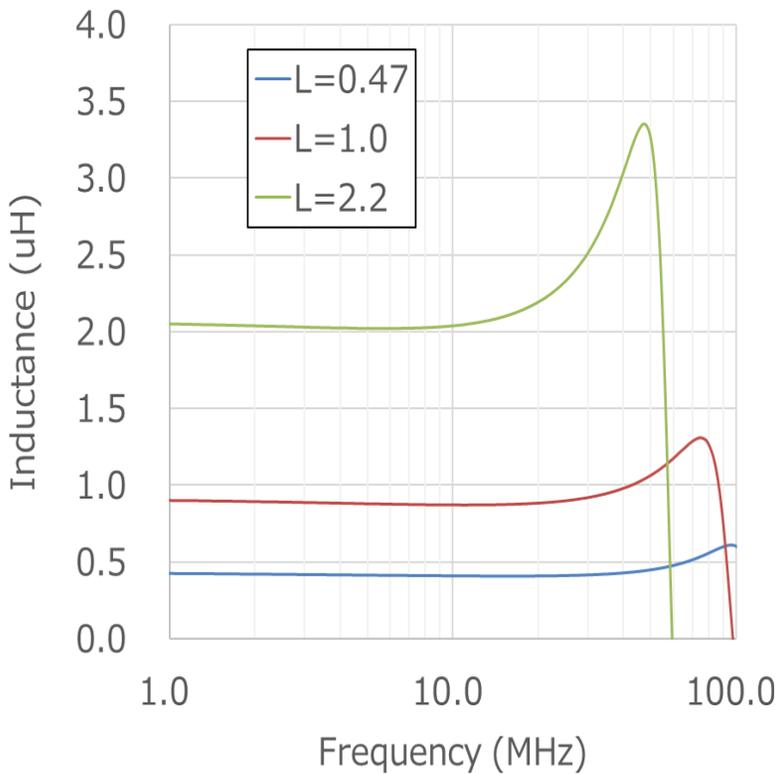
Isat : Depend on the Inductance Saturation. (-30% Reduction from Initial L Value/ Test Freq. 1MHz)
Itemp : Depend on the Self Temperature Rise. (40deg.C Typ.)

Inductance vs. DC Bias

Measurement Frequency : 1MHz



Inductance vs. Frequency



Resistance vs. Frequency

