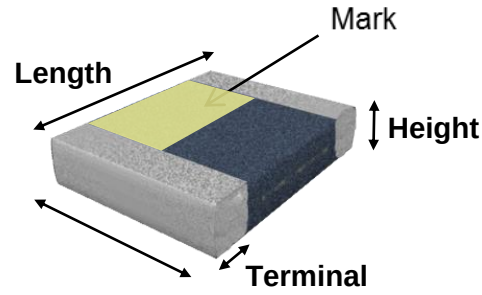
TDK Thin Film Power inductor TFM201610ALC-TCA series

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.

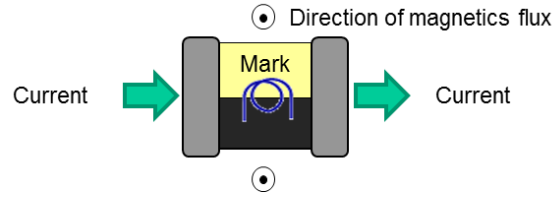
PRODUCTS SHAPE



APPLICATIONS

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

Direction of Mark



OPERATING TEMPERATURE RANGE

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

DIMENSIONS

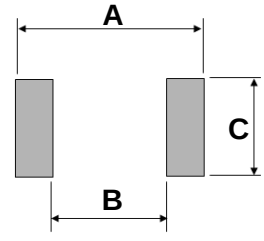
	Length ±0.2 [mm]	Width ±0.2 [mm]	Height Max. [mm]	Terminal Ref. [mm]
TFM201610	2.0	1.6	1.0	0.5

PRODUCT IDENTIFICATIONS

TFM	2016	10	ALC –	1R0	M	TCA
(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-R47MTCA	0.47 +/-20%	1.0	25	20	4.6	4.8	4.6	5.2
TFM201610ALC-1R0MTCA	1.0 +/-20%	1.0	47	43	3.0	3.3	3.4	3.6
TFM201610ALC-2R2MTCA	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.)

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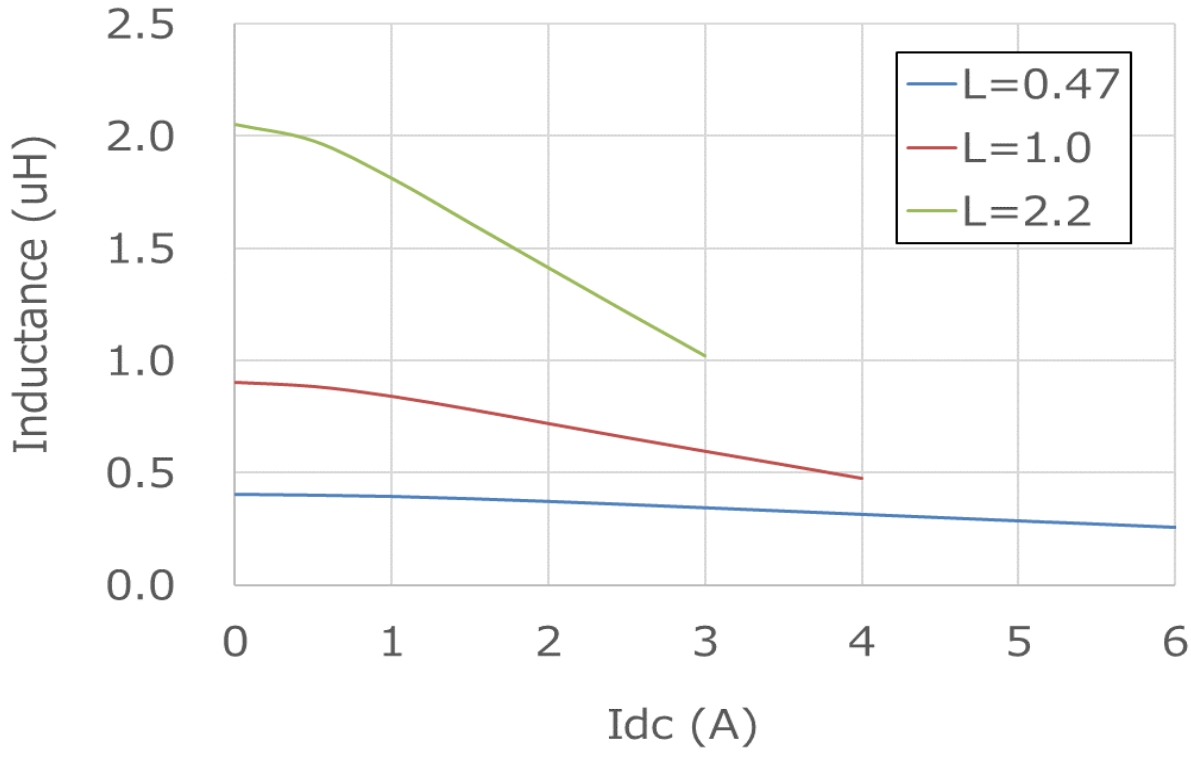
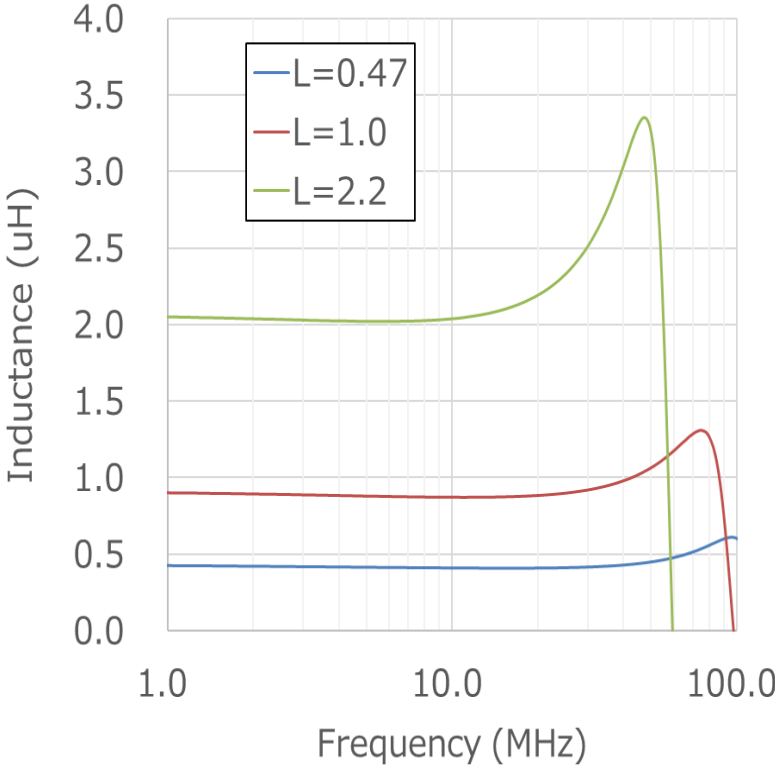
Inductance vs. DC Bias

Measurement Frequency : 1MHz



Inductance vs. Frequency



Resistance vs. Frequency