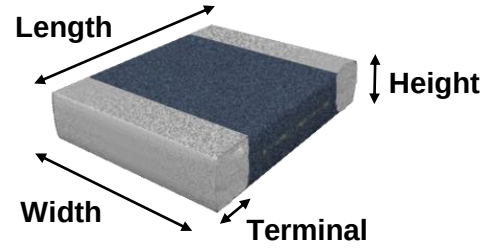
TDK Thin Film Power inductor TFM201610ALM series

FEATURES

- The package size of TFM2016 is L 2.0mm x W 1.6mm.
- 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

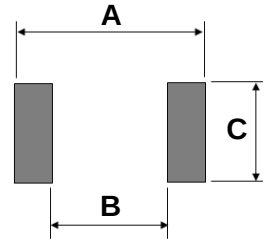
	Length ±0.2 [mm]	Width ±0.2 [mm]	Height Max. [mm]	Terminal Ref. [mm]
TFM201610ALM	2.0	1.6	1.0	0.5

PRODUCT IDENTIFICATIONS

TFM	2016	10	ALM	–	R47	M	T	GA
(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)

(1) Series name
(2) Product size (Length , Width)
(3) Product height
(4) Product identification
(5) Inductance value (R47 : 0.47µH)
(6) Inductance tolerance (M :±20%)
(7) Packing style (T : Taping)
(8) Control mark

RECOMMENDED RAND PATTERN



	A [mm]	B [mm]	C [mm]
TFM201610ALM	2.4	1.2	1.6

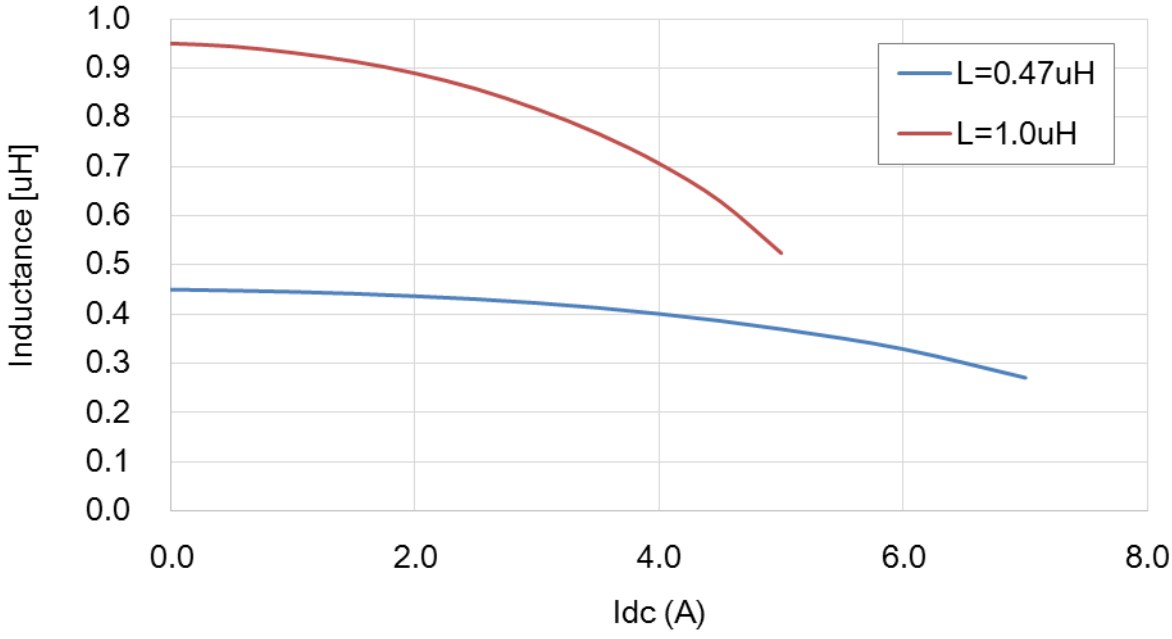
ELECTRICAL CHARACTERISTICS Simulation Stage

Identification	Inductance [µH]	Test frequency [MHz]	DC Resistance [mOhm]		Rated current			
					Isat [A]		Itemp [A]	
			Max	Typ.	Max	Typ.	Max	Typ.
TFM201610ALM-R47MTGA	0.47 +/-20%	1.0	28	25	6.0	6.3	4.5	5.0
TFM201610ALM-1R0MTGA	1.0 +/-20%	1.0	55	50	4.3	4.5	3.3	3.5

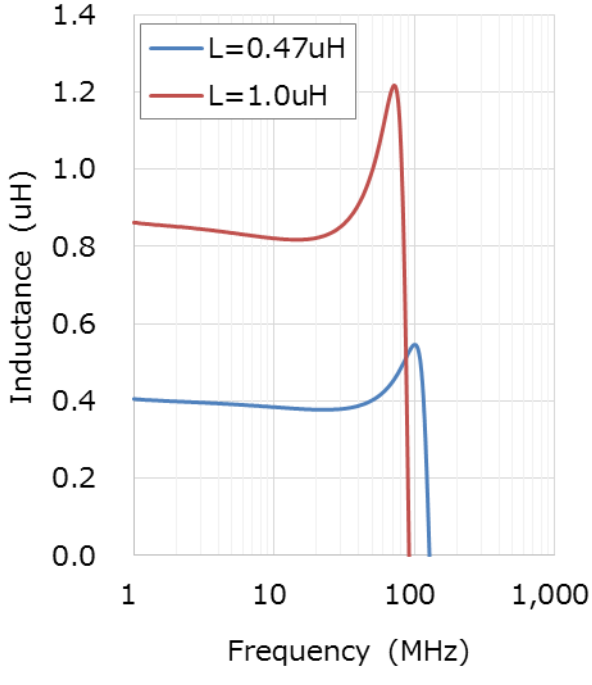
Isat : Depend on the Inductance Saturation. (-30% Reduction from Initial L Value/ Test Freq. 1MHz)
Itemp : Depend on the Self Temperature Rise (40deg.C Typ. Thermal Resistance of test board : 50deg.C/W)

Inductance vs. DC Bias

Measurement Frequency : 1MHz



Inductance vs. Frequency



Resistance vs. Frequency