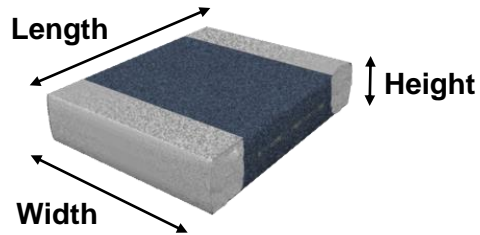


# TDK Thin Film Power inductor TFM252010ALM series

## FEATURES

- The package size of TFM2520 is L 2.5mm x W 2.0mm.
- 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.

## OPERATING TEMPERATURE RANGE

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

## PRODUCT IDENTIFICATIONS

**TFM 2520 10 ALM – 1R0 M T AA**

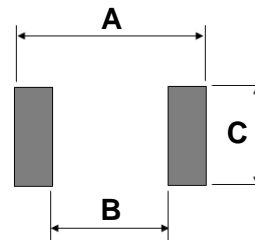
(1) (2) (3) (4) (5) (6) (7) (8)

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

## DIMENSIONS

	Length ±0.2 [mm]	Width ±0.2 [mm]	Height Max. [mm]
TFM252010ALM	2.5	2.0	1.0

## RECOMMENDED RAND PATTERN



	A [mm]	B [mm]	C [mm]
TFM252010ALM	2.9	1.5	2.0

## ELECTRICAL CHARACTERISTICS

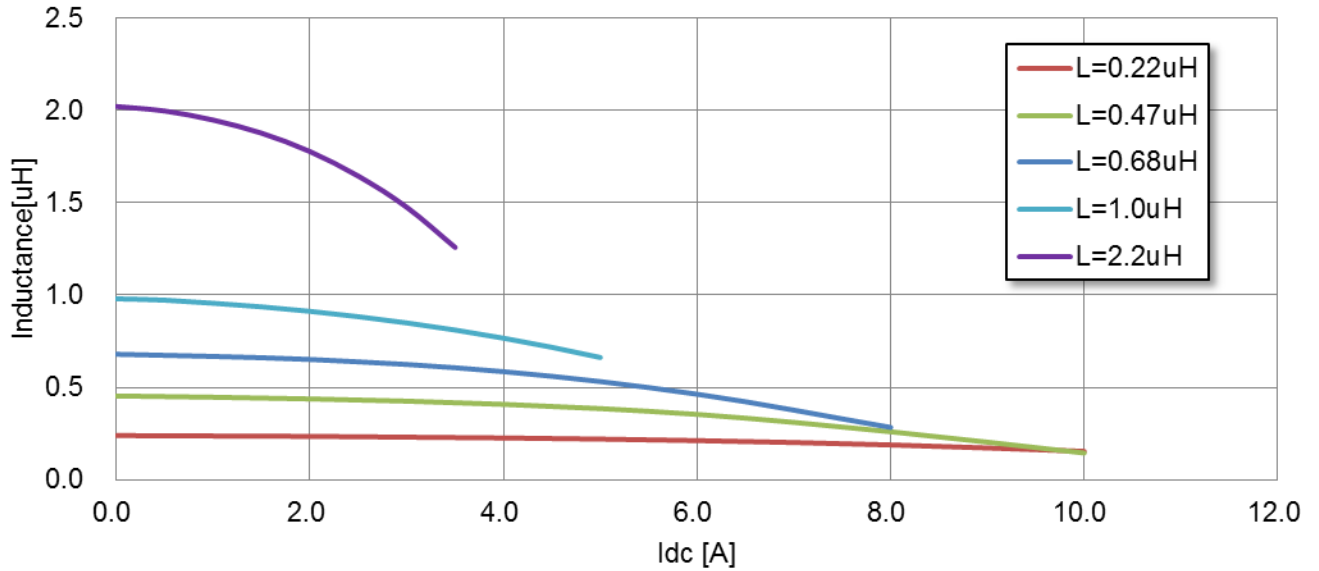
Identification	Inductance [μH]	Test frequency [MHz]	DC Resistance [mOhm]		Rated current			
					Idc-1 [A]		Idc2 [A]	
			Max	Typ.	Max	Typ.	Max	Typ.
TFM252010ALM-R22MTAA	0.22 +/-20%	1.0	13	11	7.4	8.0	6.5	7.0
TFM252010ALM-R47MTAA	0.47 +/-20%	1.0	24	20	5.8	6.5	5.1	5.5
TFM252010ALM-R68MTAA	0.68 +/-20%	1.0	36	31	5.0	6.0	3.9	4.2
TFM252010ALM-1R0MTAA	1.0 +/-20%	1.0	45	38	4.5	4.7	3.3	3.6
TFM252010ALM-2R2MTAA	2.2 +/-20%	1.0	94	82	3.1	3.5	2.6	2.8

Idc 1 : Depend on the Inductance Saturation. ( -30% Reduction from Initial L Value/ Test Freq. 1MHz )

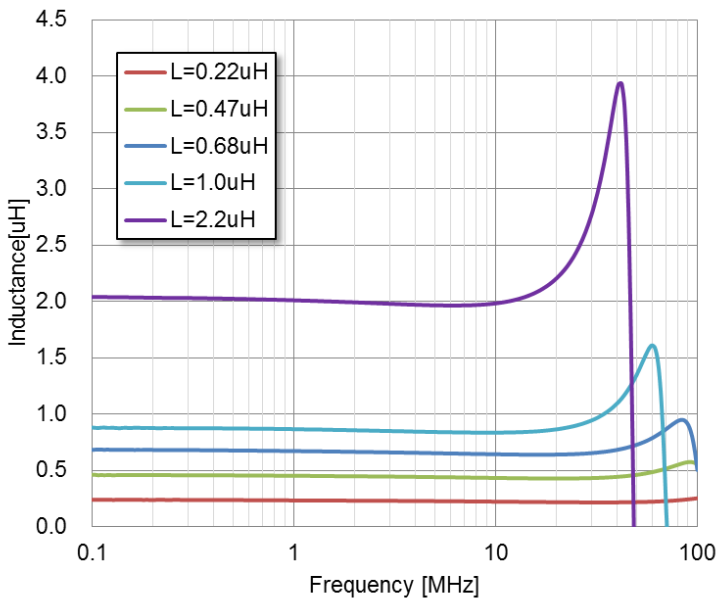
Idc 2 : Depend on the Self Temperature Rise. ( 40deg.C Typ. )

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Inductance - DC Bias



Inductance - Frequency



Resistance - Frequency

