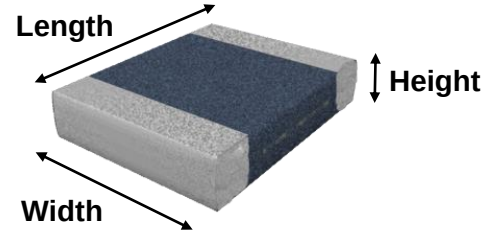
# TDK Thin Film Power inductor TFM252010ALM series

## 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

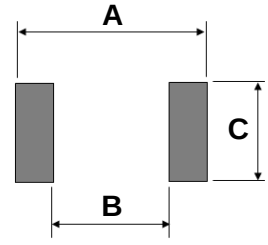
| TFM | 2520 | 10 | ALM – | 1R0 | M | T | AA |
|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |

(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 |

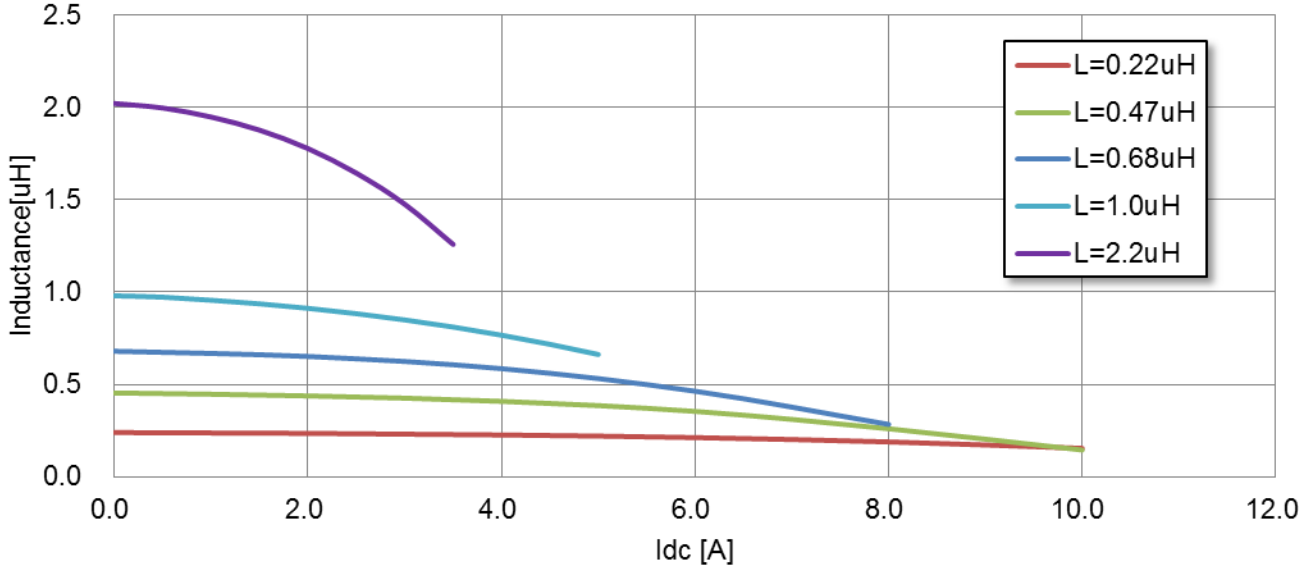
## ELECTRICAL CHARACTERISTICS

| 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 |

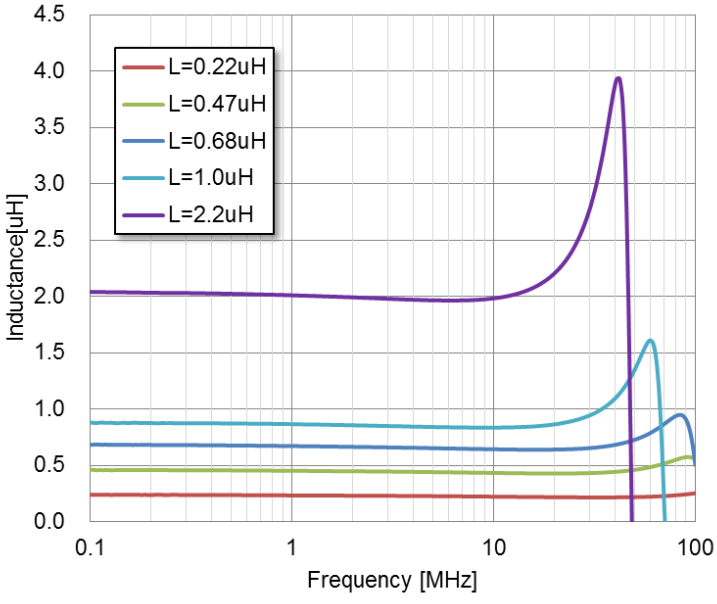
Idc 1 : Depend on the Inductance Saturation. ( -30% Reduction from Initial L Value/ Test Freq. 1MHz )
Idc 2 : Depend on the Self Temperature Rise. ( 40deg.C Typ. )

# TDK Thin Film Power inductor TFM252010ALM series

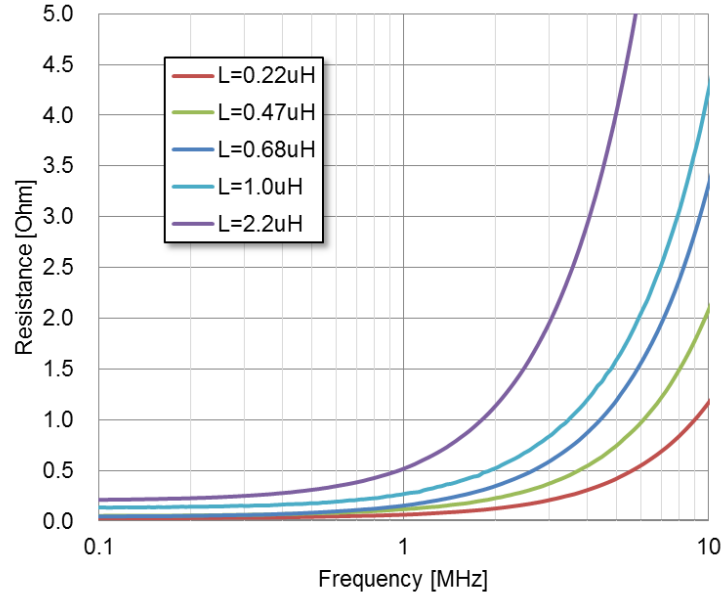
## Inductance - DC Bias




## Inductance - Frequency




## Resistance- Frequency



# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for*** Fixed Inductors ***category:***

***Click to view products by*** TDK ***manufacturer:***

Other Similar products are found below :

MLZ1608M6R8WTD25 MLZ1608N6R8LT000 MLZ1608N3R3LTD25 MLZ1608N3R3LT000 MLZ1608N150LT000 MLZ1608M150WTD25 MLZ1608M3R3WTD25 MLZ1608M3R3WT000 MLZ1608M150WT000 MLZ1608A1R5WT000 MLZ1608N1R5LT000 B82432C1333K000 PCMB053T-1R0MS PCMB053T-1R5MS PCMB104T-1R5MS CR32NP-100KC CR32NP-151KC CR32NP-180KC CR32NP-181KC CR32NP-1R5MC CR32NP-390KC CR32NP-3R9MC CR32NP-680KC CR32NP-820KC CR32NP-8R2MC CR43NP-390KC CR43NP-560KC CR43NP-680KC CR54NP-181KC CR54NP-470LC CR54NP-820KC CR54NP-8R5MC MGDQ4-00004-P MGDU1-00016-P MHL1ECTTP18NJ MHL1JCTTD12NJ PE-51506NL PE-53601NL PE-53630NL PE-53824SNLT PE-62892NL PE-92100NL PG0434.801NLT PG0936.113NLT PM06-2N7 PM06-39NJ HC2LP-R47-R HC2-R47-R HC3-2R2-R HC8-1R2-R