



**THE DATASHEET OF  
TFM160808ALC-R47MTAA**

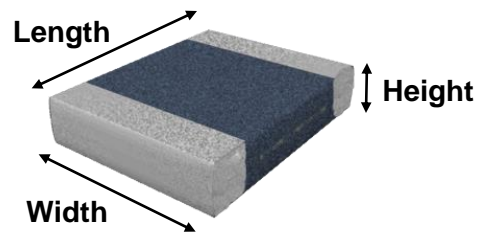


# TDK Thin Film Power inductor TFM160808ALC series

## FEATURES

- The package size of TFM1608 is L 1.6mm x W 0.8mm.
- The thickness of this product is 0.8mm, 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

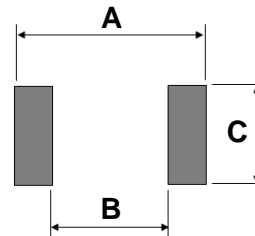
|              | Length<br>±0.2<br>[mm] | Width<br>±0.2<br>[mm] | Height<br>Max.<br>[mm] |
|--------------|------------------------|-----------------------|------------------------|
| TFM160808ALC | 1.6                    | 0.8                   | 0.8                    |

## PRODUCT IDENTIFICATIONS

**TFM 1608 08 ALC – R47 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 (R10 : 0.10μH )
- (6) Inductance tolerance ( M : ±20% )
- (7) Packing style ( T : Taping )
- (8) Control mark

## RECOMMENDED RAND PATTERN



|              | A<br>[mm] | B<br>[mm] | C<br>[mm] |
|--------------|-----------|-----------|-----------|
| TFM160808ALC | 2.0       | 0.8       | 0.8       |

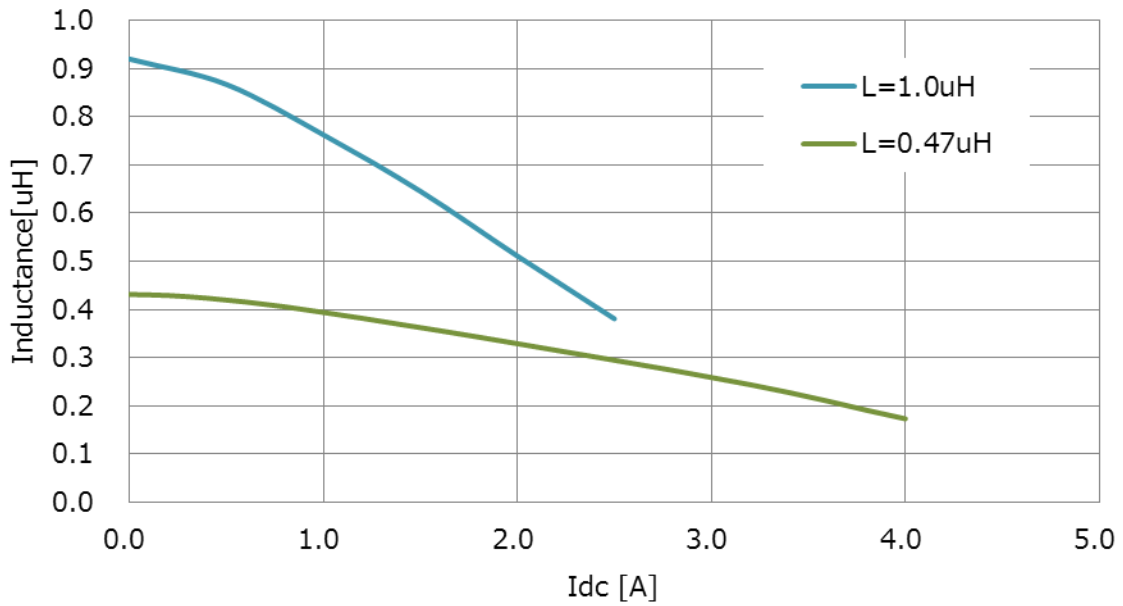
## ELECTRICAL CHARACTERISTICS

| Identification       | Inductance<br>[μH] | Test<br>frequency<br>[MHz] | DC Resistance<br>[mOhm] |      | Rated current |      |              |      |
|----------------------|--------------------|----------------------------|-------------------------|------|---------------|------|--------------|------|
|                      |                    |                            |                         |      | Isat<br>[A]   |      | Itemp<br>[A] |      |
|                      |                    |                            | Max                     | Typ. | Max.          | Typ. | Max          | Typ. |
| TFM160808ALC-R47MTAA | 0.47 +/-20%        | 1.0                        | 62                      | 55   | 2.0           | 2.4  | 2.6          | 2.7  |
| TFM160808ALC-1R0MTAA | 1.0+/-20%          | 1.0                        | 155                     | 138  | 1.1           | 1.3  | 1.7          | 1.8  |

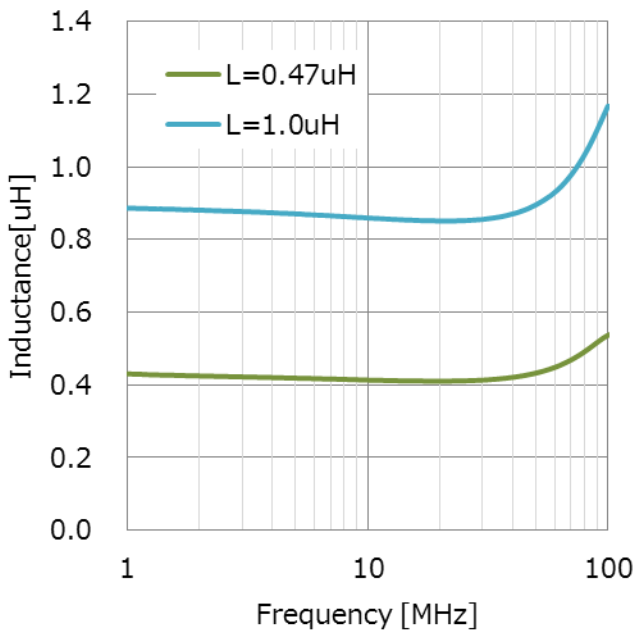
Isat : Depend on the Inductance Saturation. ( -30% Reduction from Initial L Value/ Test Freq. 1MHz )  
 Itemp : Depend on the Self Temperature Rise. ( 40deg.C Typ. Thermal Resistance of test board : 50deg.C/W )

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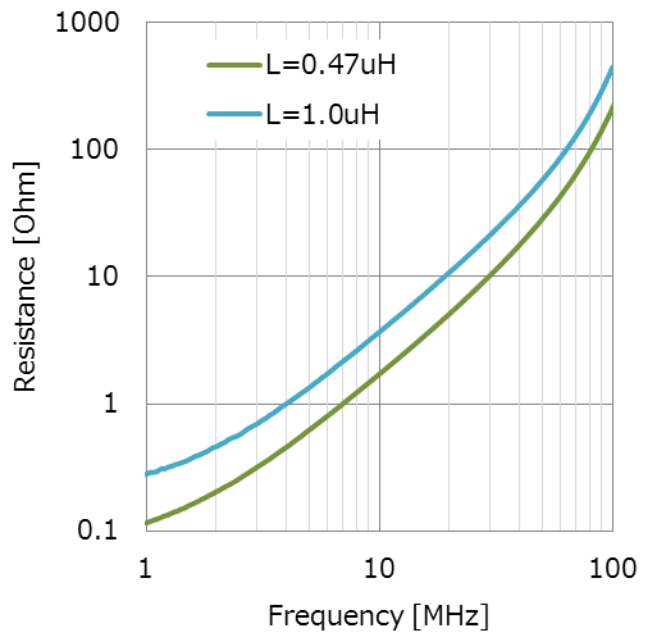
INDUCTANCE VS. DC SUPERPOSITION CHARACTERISTICS ( 1MHz )



INDUCTANCE VS. FREQUENCY



RESISTANCE VS. FREQUENCY









## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

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 [TDK Corporation](#) Information

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