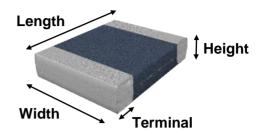


## TDK Thin Film Power inductor TFM201608ALC series

#### **FEATURES**

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



|              | ±0.2 | ±0.2 | Max. | Terminal<br>Ref.<br>[mm] |
|--------------|------|------|------|--------------------------|
| TFM201608ALC | 2.0  | 1.6  | 0.8  | 0.5                      |

#### **APPLICATIONS**

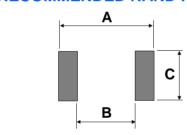
- •Generic use for DC/DC Converter of portable device.
- •Used for Smart phone, Feature phone, HDD, SSD, etc.

#### PRODUCT IDENTIFICATIONS

#### TFM 2016 08 ALC - 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

## RECOMMENDED RAND PATTERN



|              | A<br>[mm] | B<br>[mm] | C<br>[mm] | n] |  |
|--------------|-----------|-----------|-----------|----|--|
| TFM201608ALC | 2.4       | 1.2       | 1.6       |    |  |

#### **ELECTRICAL CHARACTERISTICS**

| Identification       | Inductance<br>[μH] | Test<br>frequency<br>[MHz] | DC Resistance [mOhm] |      | Isat<br>[A] |      | Itemp<br>[A] |      |
|----------------------|--------------------|----------------------------|----------------------|------|-------------|------|--------------|------|
|                      |                    |                            | Max                  | Тур. | Max         | Тур. | Max          | Тур. |
| TFM201608ALC-R47MTAA | 0.47 +/-20%        | 1.0                        | 27                   | 24   | 4.4         | 4.7  | 4.3          | 4.6  |
| TFM201608ALC-1R0MTAA | 1.0 +/-20%         | 1.0                        | 66                   | 56   | 2.5         | 2.8  | 2.8          | 3.1  |
| TFM201608ALC-2R2MTAA | 2.2 +/-20%         | 1.0                        | 123                  | 110  | 2.0         | 2.5  | 2.0          | 2.2  |

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

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

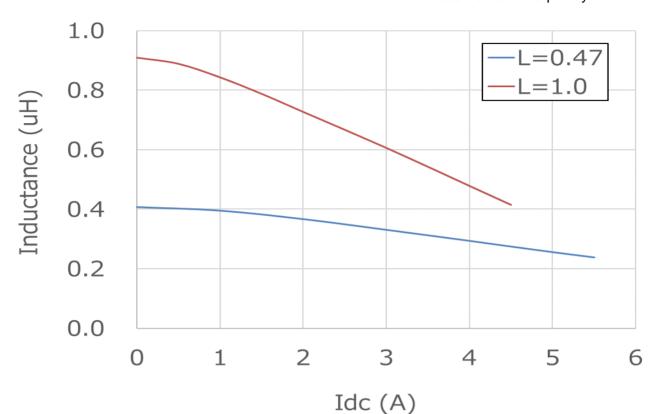


# TDK Thin Film Power inductor TFM201608ALC series

## **Inductance vs. DC Bias**

Measurement Frequency: 1MHz

**MTDK** 



## **Inductance vs. Frequency**

## Resistance vs. Frequency

