



TDK Thin Film Power inductor TFM201610ALM series

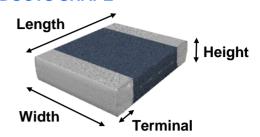
FEATURES

- •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.

APPLICATIONS

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

PRODUCTS SHAPE



DIMENSIONS

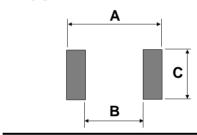
	±0.2	±0.2	Max.	Terminal Ref. [mm]
TFM201610ALM	2.0	1.6	1.0	0.5

PRODUCT IDENTIFICATIONS

<u>TFM</u> <u>2016</u> <u>10</u> <u>ALM</u> – <u>R47</u> <u>M</u> <u>T</u> <u>GA</u> (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	Тур.	Max	Тур.	Max	Тур.
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)

2017.Dec rev.4

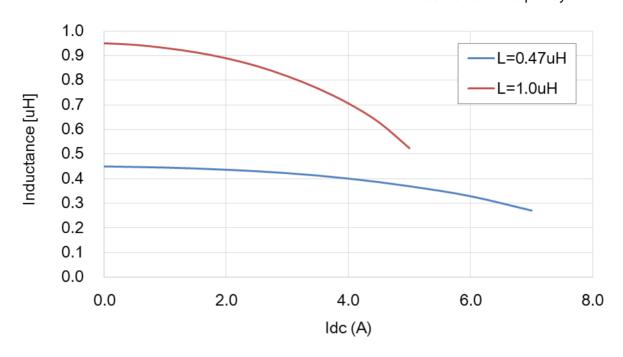




TDK Thin Film Power inductor TFM201610ALM series

Inductance vs. DC Bias

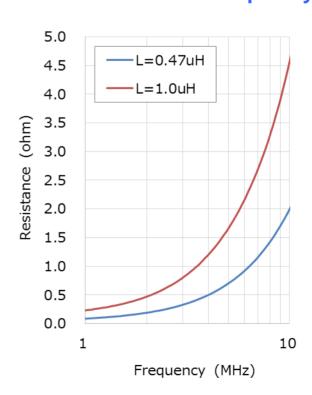
Measurement Frequency: 1MHz



Inductance vs. Frequency

1.4 L=0.47uH 1.2 L=1.0uH 1.0 Inductance (uH) 8.0 0.6 0.4 0.2 0.0 1 10 100 1,000 Frequency (MHz)

Resistance vs. 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 MLZ1608N3R3LTD00 MLZ1608N150LT000 MLZ1608N150WTD00 MLZ1608M150WTD00 MLZ1608M1SWTD00 MLZ1608M1SWTD00 MLZ1608N1R5WTD00 MLZ1608N1R5WTD00 MLZ1608N1R5WTD00 MLZ1608N1R5WTD00 B82432C1333K000 PCMB053T-1R0MS PCMB053T-1R5MS PCMB104T-1R5MS CR32NP-100KC CR32NP-151KC CR32NP-180KC CR32NP-181KC CR32NP-180KC CR32NP-181KC CR32NP-390KC CR32NP-390KC CR32NP-389MC 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 HC3-2R2-R HC8-1R2-R