

## CTMMC4016F Series

From 1.0 $\mu$ H to 47 $\mu$ H



### SPECIFICATIONS

\*I<sub>rms</sub>: DC current (A) that will cause an approximate  $\Delta T$  of 40°C.  
 \*\*I<sub>sat</sub>: DC current (A) that will cause L0 to drop approximately 30%.

Item		Inductance @100kHz 0.25V, 0A ( $\mu$ H)	DCR Typ. 25°C (m $\Omega$ )	DCR Max. 25°C (m $\Omega$ )	*I <sub>rms</sub> DC Typ. (A)	**I <sub>sat</sub> DC Typ. (A)
CTMMC4016F-1R0M	L1-2 & L3-4	1.00	6.30	7.50	12.00	30.20
CTMMC4016F-1R5M	L1-2 & L3-4	1.50	8.60	10.00	11.10	28.10
CTMMC4016F-2R2M	L1-2 & L3-4	2.20	14.00	16.50	8.60	20.60
CTMMC4016F-2R7M	L1-2 & L3-4	2.70	16.30	16.80	7.40	16.50
CTMMC4016F-3R3M	L1-2 & L3-4	3.30	20.70	23.50	6.80	14.30
CTMMC4016F-4R7M	L1-2 & L3-4	4.70	24.40	29.00	6.20	13.80
CTMMC4016F-6R8M	L1-2 & L3-4	6.80	38.00	44.00	5.00	12.00
CTMMC4016F-8R2M	L1-2 & L3-4	8.20	41.20	46.00	4.70	11.30
CTMMC4016F-100M	L1-2 & L3-4	10.00	55.00	62.00	3.70	9.80
CTMMC4016F-150M	L1-2 & L3-4	15.00	83.00	95.00	3.25	7.80
CTMMC4016F-220M	L1-2 & L3-4	22.00	133.00	160.00	2.20	6.10
CTMMC4016F-330M	L1-2 & L3-4	33.00	207.00	230.00	2.05	5.00
CTMMC4016F-470M	L1-2 & L3-4	47.00	312.00	340.00	1.50	4.40

### PHYSICAL DIMENSIONS

Size	A	B	C	D	E
			Max.		
mm	10.0 $\pm$ 0.3	11.2 $\pm$ 0.5	4.1	2.5 $\pm$ 0.2	2.2 $\pm$ 0.2
inches	0.394 $\pm$ 0.012	0.441 $\pm$ 0.020	0.161	0.098 $\pm$ 0.008	0.087 $\pm$ 0.008

### CHARACTERISTICS

**Description:** SMD (shielded) coupled power inductor.

**Features:**

- 1:1 Filter, excellent electrical performance and better EMI performance
- Coupling is > 90% compared with similar components, it has better leakage inductance (Lk) and rated current (I<sub>r</sub>)
- Frequency range up to 1.0~3.0MHz
- Shielded construction
- Ultra low buzz noise

**Applications:** Isolated converters, SEPIC, Step-down, Boost, LED lighting, Common Mode applications.

**Operating Temperature:** -40°C to 125°C

**Part Temperature (Ambient+Temp.Rise):** Should not exceed 125°C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

**Rated operating voltage (across inductor):** 60V

**Inductance Tolerance:**  $\pm$ 20%

**Testing:** Inductance tested at 100KHz, 0.25V, 0A

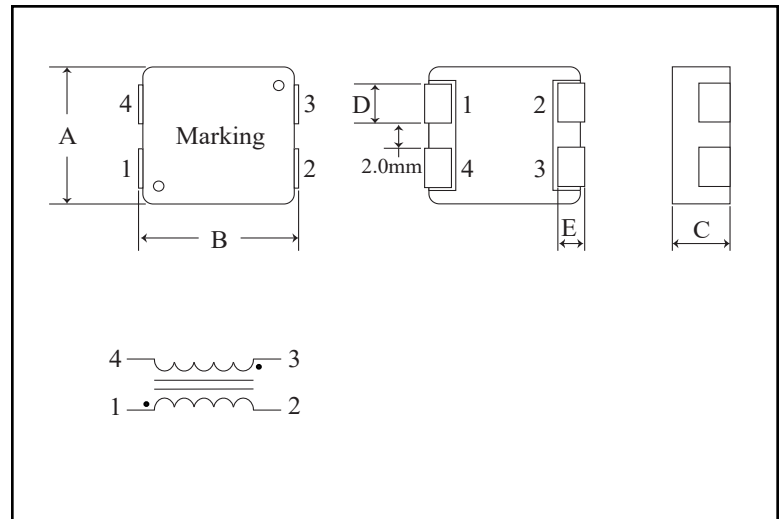
**Packaging:** Tape & Reel.

**Marking:** Parts are marked with inductance code.

**Miscellaneous:**

- All test data is referenced to 25°C ambient
- RoHS Compliant
- Moisture Sensitivity Level (MSL 1)
- This electronic component was designed and manufactured for use in general electronic equipment.
- Electronic components that will be used in safety-critical or high-reliability applications should be pre-evaluated by the customer.
- The component is designed and manufactured to be used within the datasheet specified values.
- Do not drop or impact components, the component may be damaged.

**Samples available. See website for ordering information.**



### TYPICAL PAD LAYOUT

