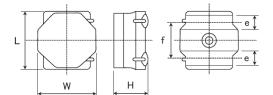
## **Spec Sheet**

## Metal Core SMD Power Inductors (MCOIL™, MD series)

# MDMK4040T4R7MM



#### Features

- Item Summary
   4.7uH±20%, 1.9A, 4.0x4.0x1.2mm
- Lifecycle Stage
   Mass Production
- Standard packaging quantity (minimum)
   Taping Embossed 1000pcs

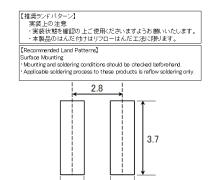
#### Products characteristics table

Inductance	4.7 uH ± 20 %
Case Size (mm)	4.0x4.0
Rated Current (max)	1.9 A
Saturation Current (max)	2.5 A
Saturation Current (typ)	3 A
Temperature Rise Current (max)	1.9 A
Temperature Rise Current (typ)	2.2 A
DC Resistance (max)	0.16 Ω
DC Resistance (typ)	0.14 Ω
LQ Measuring Frequency	1 MHz
Operating Temp. Range	-40 to +125 ℃ (Including-self-generated heat)
Temperature characteristic (Inductance change)	± 10 %
RoHS2 Compliance (10 subst.)	Yes
REACH Compliance (173 subst.)	Yes
Halogen Free	Yes
Soldering	Reflow

#### External Dimensions

Dimension L	4.0 ±0.2 mm
Dimension W	4.0 ±0.2 mm
Dimension H	Max 1.2 mm
Dimension e	1.1 ±0.2 mm
Dimension f	2.5 ±0.2 mm

## Recommended Land Patterns



2017.04.30

Unit: mm

## Metal Core SMD Power Inductors (MCOIL™, MD series)

MCOIL™

MDMK4040T4R7MM



Dimension unit: mm unit: inch

Length: 4.0 +/- 0.2 (0.157 +/- 0.008)

Width: 4.0 +/- 0.2 (0.157 +/- 0.008)

Height: 1.2 max. (0.047 max.)

Inductance: 4.7 uH (test freq at 1MHz)
DC Resistance: 0.140 / 0.160 ohm (typ/max)
Saturation Current: 3,000 / 2,500 mA (typ/max)
Temp. rise Current: 2,200 / 1,900 mA (typ/max)
Saturation current typical: 30% reduction from initial L value.

Temp rise Current typical: Temperature will rise by 40 deg C

Maximum rated voltage: DC 25 V

