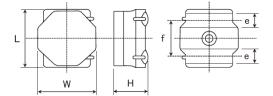
Spec Sheet

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

MDWK4040T4R7MM



Features

- Item Summary
 4.7uH±20%, 2.5A, 4.0x4.0x2.0mm
- Lifecycle Stage
 Mass Production
- Standard packaging quantity (minimum)
 Taping Embossed 700pcs

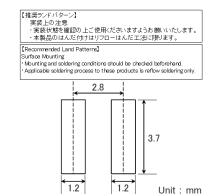
Products characteristics table

Inductance	4.7 uH ± 20 %
Case Size (mm)	4.0x4.0
Rated Current (max)	2.5 A
Saturation Current (max)	3.5 A
Saturation Current (typ)	5 A
Temperature Rise Current (max)	2.5 A
Temperature Rise Current (typ)	2.8 A
DC Resistance (max)	107 mΩ
DC Resistance (typ)	93 mΩ
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 2.0 mm
Dimension e	1.1 ±0.2 mm
Dimension f	2.5 ±0.2 mm

Recommended Land Patterns



2017.04.30

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

MCOIL[™]

MDWK4040T4R7MM



Dimension unit: mm unit: inch

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

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

Height: 2.0 max. (0.079 max.)

Inductance: 4.7 uH (test freq at 1MHz)
DC Resistance: 0.093 / 0.107 ohm (typ/max)
Saturation Current: 5,000 / 3,500 mA (typ/max)
Temp. rise Current: 2,800 / 2,500 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

