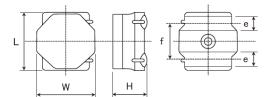
Spec Sheet

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

MDPK5050T3R3MM



Features

- Item Summary
 3.3uH±20%, 2.9A, 4.9x4.9x1.4mm
- Lifecycle Stage
 - Mass Production
- Standard packaging quantity (minimum)
 Taping Embossed 1000pcs

Products characteristics table

Inductance	3.3 uH ± 20 %
Case Size (mm)	4.9x4.9
Rated Current (max)	2.9 A
Saturation Current (max)	3.8 A
Saturation Current (typ)	4.5 A
Temperature Rise Current (max)	2.9 A
Temperature Rise Current (typ)	3.4 A
DC Resistance (max)	86 mΩ
DC Resistance (typ)	73 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	4.9 ±0.2 mm
Dimension W	4.9 ±0.2 mm
Dimension H	Max 1.4 mm
Dimension e	1.2 ±0.2 mm
Dimension f	3.3 ±0.2 mm

Recommended Land Patterns



2017.04.30

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

MCOIL[™]
MDPK5050T3R3MM



Dimension unit: mm unit: inch

Length: 4.9 +/- 0.2 (0.193 +/- 0.008)

Width: 4.9 +/- 0.2 (0.193 +/- 0.008)

Height: 1.4 max. (0.055 max.)

Inductance: 3.3 uH (test freq at 1MHz)
DC Resistance: 0.073 / 0.086 ohm (typ/max)
Saturation Current: 4,500 / 3,800 mA (typ/max)
Temp. rise Current: 3,400 / 2,900 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

