



High Current, Surface Mount Inductors





ELECTRICAL SPECIFICATIONS

Inductance Range: 10 µH to 330 µH **Inductance Tolerance: 20 %**

Operating Temperature: - 25 °C to + 105 °C Storage Temperature: - 40 °C to + 125 °C Resistance to Solder Heat: 260 °C for 10 s

| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|------------------------|----------|-------------------------------------------|--|--|--|
| INDUCTANCE (µH) | TEST FREQUENCY L | DCR MAX. | RATED DC CURRENT (A) ⁽¹⁾ | | | |
| 10.0 | 2.52 MHz | 0.08 | 1.44 | | | |
| 12.0 | 2.52 MHz | 0.09 | 1.39 | | | |
| 15.0 | 2.52 MHz | 0.10 | 1.24 | | | |
| 18.0 | 2.52 MHz | 0.11 | 1.12 | | | |
| 22.0 | 2.52 MHz | 0.13 | 1.07 | | | |
| 27.0 | 2.52 MHz | 0.15 | 0.94 | | | |
| 33.0 | 2.52 MHz | 0.17 | 0.85 | | | |
| 39.0 | 2.52 MHz | 0.22 | 0.74 | | | |
| 47.0 | 2.52 MHz | 0.25 | 0.68 | | | |
| 56.0 | 2.52 MHz | 0.28 | 0.64 | | | |
| 68.0 | 2.52 MHz | 0.33 | 0.59 | | | |
| 82.0 | 2.52 MHz | 0.41 | 0.54 | | | |
| 100.0 | 1 kHz | 0.48 | 0.51 | | | |
| 120.0 | 1 kHz | 0.54 | 0.49 | | | |
| 150.0 | 1 kHz | 0.75 | 0.40 | | | |
| 180.0 | 1 kHz | 1.02 | 0.36 | | | |
| 220.0 | 1 kHz | 1.20 | 0.31 | | | |
| 270.0 | 1 kHz | 1.31 | 0.29 | | | |
| 330.0 | 1 kHz | 1.50 | 0.28 | | | |

FEATURES

- High energy storage
- · Low resistance
- Tape and reel packaging for automatic handling
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



HALOGEN FREE

MATERIALS

Core: Ferrite

Wire: Enamelled copper wire Terminals: Ni and Sn/Ag/Cu

| DIMENSIONS in inches [millimeters] | | | | | | |
|-------------------------------------------|-----------------------------|------------------------------|--|--|--|--|
| | | | | | | |
| A C | | | | | | |
| E TYPICAL PAD LAYOUT | | | | | | |
| Α | В | С | | | | |
| 0.307 ± 0.01 [7.8 ± 0.3] | 0.138 ± 0.02 [3.5 ± 0.5] | 0.276 ± 0.01 [7.0 ± 0.3] | | | | |
| D | E | F | | | | |
| 0.296 [7.5] | 0.118 [3.0] | 0.079 [2.0] | | | | |

| DESCRIPTION | | | | | | |
|-------------|------------------|----------------------|--------------|-------------------------------|--|--|
| IDCP-3114 | 10 μH | ± 20 % | ER | e1 | | |
| MODEL | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD | | |

| GLOBAL PART NUMBER | | | | |
|--------------------|---------|-----------------|---------------------|-------------------------|
| I D C P | 3 1 1 4 | E R | 1 0 0 | M |
| PRODUCT FAMILY | SIZE | PACKAGE CODE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE |

Rated Current: Value obtained when current flows and the temperature has risen 40 °C or when DC current flows and the initial value of inductance has fallen by 10 %, whichever is smaller.



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