



High Current, Surface Mount Inductors





ELECTRICAL SPECIFICATIONS

Inductance Range: 10 μH to 560 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 RATED DC CURRENT (1) TEST **INDUCTANCE FREQUENCY** DCR MAX. (μH) **(**Ω**)** (A) 2.52 MHz 0.05 10.0 2.38 12.0 2.52 MHz 0.06 2.13 0.07 1.87 15.0 2.52 MHz 18.0 2.52 MHz 0.08 1.73 22.0 2.52 MHz 0.09 1.60 27.0 2.52 MHz 0.10 1.44 33.0 2.52 MHz 0.12 1.26 39.0 2.52 MHz 0.15 1.20 47.0 2.52 MHz 0.17 1.10 56.0 2.52 MHz 0.20 1.01 0.22 68.0 2.52 MHz 0.91 82.0 2.52 MHz 0.25 0.85 100.0 1 kHz 0.34 0.74 120.0 0.40 1 kHz 0.69 0.54 150.0 1 kHz 0.61 0.62 180.0 1 kHz 0.56 220.0 1 kHz 0.72 0.53 270.0 1 kHz 0.95 0.45 330.0 1 kHz 1.10 0.42 390.0 1 kHz 1.24 0.38 470.0 1 kHz 1.53 0.35 560.0 1.90 1 kHz 0.32

Note

FEATURES

- · High energy storage
- · Low resistance
- · Tape and reel packaging for automatic handling
- Compliant to RoHS directive 2002/95/EC



ROHS

MATERIALS

Core: Ferrite

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

DIMENSIONS in inches [millimeters]							
B							
A C							
E TYPICAL PAD LAYOUT							
Α	В	С					
0.394 ± 0.01 [10.0 ± 0.3]	0.158 ± 0.02 [4.0 ± 0.5]	0.355 ± 0.01 $[9.0 \pm 0.3]$					
D	E	F					
0.374 [9.5]	0.148 [3.75]	0.099 [2.5]					

DESCRIPTION							
IDCP-3916	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 9 1 6	E R	1 0 0	М
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

⁽¹⁾ 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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