



# **High Current, Surface Mount Inductors - Non-Shielded**





#### **ELECTRICAL SPECIFICATIONS**

Inductance Range: 10  $\mu H$  to 330  $\mu H$  Inductance Tolerance: 20 %

Operating Temperature: -40 °C to +125 °C (temperature

rise included)

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. (Ω)	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			

#### Note

#### **FEATURES**

- High energy storage
- Low resistance
- Tape and reel packaging for automatic handling
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



ROHS COMPLIANT HALOGEN FREE

#### **MATERIALS**

Core: ferrite

**Wire:** enamelled copper wire **Terminals:** Ni and Sn / Ag / Cu

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

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

GLOBAL PART NUMBER				
PRODUCT FAMILY	3 1 1 4 SIZE	E R PACKAGE	1 0 0	MINDUCTANCE
		CODE	VALUE	TOLERANCE

<sup>(1)</sup> 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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