

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





#### **ELECTRICAL SPECIFICATIONS**

Inductance Range: 10 µH to 470 µH 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) <sup>(1)</sup>				
10.0	2.52 MHz	0.07	2.30				
12.0	2.52 MHz	0.08	2.00				
15.0	2.52 MHz	0.09	1.80				
18.0	2.52 MHz	0.10	1.60				
22.0	2.52 MHz	0.11	1.50				
27.0	2.52 MHz	0.12	1.30				
33.0	2.52 MHz	0.13	1.20				
39.0	2.52 MHz	0.16	1.10				
47.0	2.52 MHz	0.18	1.10				
56.0	2.52 MHz	0.24	0.94				
68.0	2.52 MHz	0.28	0.85				
82.0	2.52 MHz	0.37	0.78				
100.0	1 kHz	0.43	0.72				
120.0	1 kHz	0.47	0.66				
150.0	1 kHz	0.64	0.58				
180.0	1 kHz	0.71	0.51				
220.0	1 kHz	0.96	0.49				
270.0	1 kHz	1.11	0.42				
330.0	1 kHz	1.26	0.40				
390.0	1 kHz	1.77	0.36				
470.0	1 kHz	1.96	0.34				

#### Note

#### **FEATURES**

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



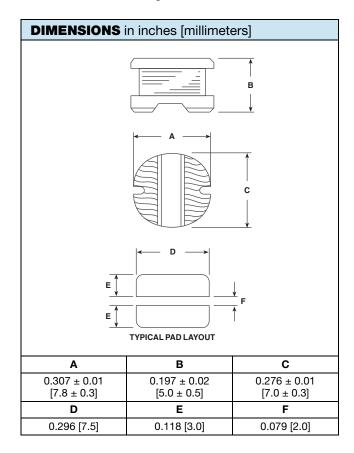
RoHS COMPLIANT

HALOGEN FREE

#### **MATERIALS**

Core: ferrite

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



DESCRIPTION							
IDCP-3020	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 0 2 0	E R	1 0 0	M
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE 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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