



# **High Current, Surface Mount Inductors**





### **ELECTRICAL SPECIFICATIONS**

Inductance Range: 10  $\mu H$  to 470  $\mu H$  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	0.07	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
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



ROHS COMPLIANT HALOGEN FREE

#### **MATERIALS**

Core: Ferrite

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

<b>DIMENSIONS</b>	<b>DIMENSIONS</b> in inches [millimeters]					
	A	c				
E → D → F  E → TYPICAL PAD LAYOUT						
Α	В	С				
0.307 ± 0.01 [7.8 ± 0.3]	0.197 ± 0.02 [5.0 ± 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]				

DESCRIPTIO	N			
IDCP-3020	10 μH	± 20 %	ER	e1
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER				
PRODUCT FAMILY	3 0 2 0 SIZE	PACKAGE CODE	1 0 0 INDUCTANCE VALUE	M 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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Revision: 02-Oct-12 Document Number: 91000