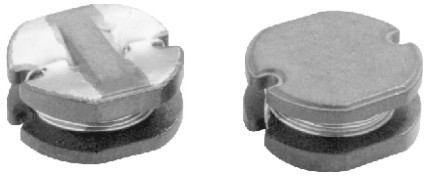
High Current, Surface Mount Inductors - Non-Shielded



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

Pb-free

RoHS COMPLIANT

HALOGEN FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 10 µH to 470 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

MATERIALS

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

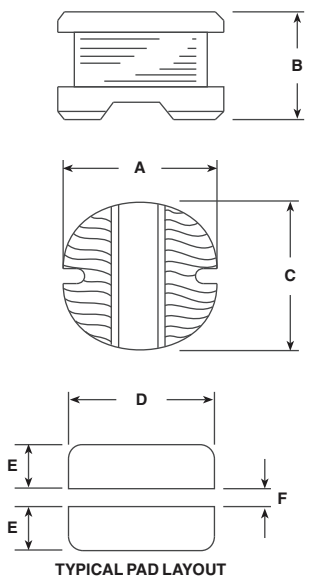
STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE (µH)	TEST FREQUENCY L	DCR MAX. (Ω)	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

(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.

DIMENSIONS in inches [millimeters]



TYPICAL PAD LAYOUT

A	B	C
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]

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

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