

## High Current, Surface Mount Inductors



### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0  $\mu\text{H}$  to 1000  $\mu\text{H}$ , tested at 1.0  $V_{\text{RMS}}$   
**Inductance Tolerance:** 20 %, tighter tolerance available upon request  
**Operating Temperature:** - 40 °C to + 125 °C  
**Resistance to Solder Heat:** 260 °C for 10 s

### 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**

### MECHANICAL SPECIFICATIONS

**Core:** Ferrite  
**Wire:** Enamelled copper wire  
**Base:** LCP  
**Terminals:** Nickel bronze  
**Adhesive:** Epoxy resin

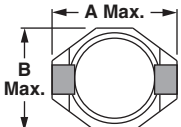

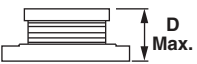
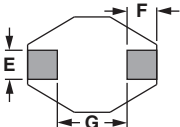
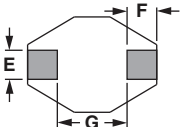
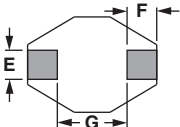
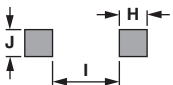
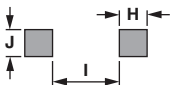
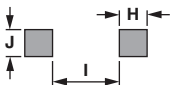
### STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE ( $\mu\text{H}$ )	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. ( $\Omega$ )	$I_{\text{SAT}}$ (A)	$I_{\text{RMS}}$ (A)
1.0	$\pm 20 \%$	100	0.009	9.0	6.8
1.5	$\pm 20 \%$	100	0.010	8.0	6.4
2.2	$\pm 20 \%$	100	0.012	7.0	6.1
3.3	$\pm 20 \%$	100	0.015	6.4	5.4
4.7	$\pm 20 \%$	100	0.018	5.4	4.8
6.8	$\pm 20 \%$	100	0.027	4.6	4.4
10	$\pm 20 \%$	100	0.038	3.8	3.9
15	$\pm 20 \%$	100	0.046	3.0	3.1
22	$\pm 20 \%$	100	0.085	2.6	2.7
33	$\pm 20 \%$	100	0.10	2.0	2.1
47	$\pm 20 \%$	100	0.14	1.6	1.8
68	$\pm 20 \%$	100	0.20	1.4	1.5
100	$\pm 20 \%$	100	0.28	1.2	1.3
150	$\pm 20 \%$	100	0.40	1.0	1.0
220	$\pm 20 \%$	100	0.61	0.8	0.8
330	$\pm 20 \%$	100	1.02	0.6	0.6
470	$\pm 20 \%$	100	1.27	0.5	0.5
680	$\pm 20 \%$	100	2.02	0.4	0.4
1000	$\pm 20 \%$	100	3.00	0.3	0.3

#### Notes

- Inductance drop = 10 % typ. at  $I_{\text{SAT}}$
- $\Delta T = 15 \text{ }^{\circ}\text{C}$  typ. at  $I_{\text{RMS}}$

### DIMENSIONS in inches [millimeters]

								
A (Max.)	B (Max.)	D (Max.)	E	F	G	H	I	J
0.510 [12.95]	0.370 [9.40]	0.205 [5.21]	0.100 [2.54]	0.100 [2.54]	0.300 [7.62]	0.115 [2.92]	0.290 [7.37]	0.110 [2.79]

### DESCRIPTION

MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD
IDC-5020	10 $\mu\text{H}$	$\pm 20 \%$	ER	e3

### GLOBAL PART NUMBER

<b>I</b>	<b>D</b>	<b>C</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>E</b>	<b>R</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>M</b>
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL



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