

## High Current, Surface Mount Inductors



### 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**

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0  $\mu$ H to 68  $\mu$ 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

### MATERIALS

**Core:** Ferrite

**Wire:** Enamelled copper wire

**Terminals:** Ag and Sn/Ag/Cu

STANDARD ELECTRICAL SPECIFICATIONS			
INDUCTANCE ( $\mu$ H)	TEST FREQUENCY L	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (A) <sup>(1)</sup>
1.0	7.96 MHz	0.033	3.80
1.4	7.96 MHz	0.038	3.30
1.8	7.96 MHz	0.042	2.91
2.2	7.96 MHz	0.047	2.60
2.7	7.96 MHz	0.052	2.43
3.3	7.96 MHz	0.058	2.15
3.9	7.96 MHz	0.076	1.98
4.7	7.96 MHz	0.094	1.70
5.6	7.96 MHz	0.101	1.60
6.8	7.96 MHz	0.117	1.41
8.2	7.96 MHz	0.132	1.26
10.0	2.52 MHz	0.182	1.15
12.0	2.52 MHz	0.210	1.05
15.0	2.52 MHz	0.235	0.92
18.0	2.52 MHz	0.338	0.84
22.0	2.52 MHz	0.378	0.76
27.0	2.52 MHz	0.522	0.71
33.0	2.52 MHz	0.540	0.64
39.0	2.52 MHz	0.587	0.59
47.0	2.52 MHz	0.844	0.54
56.0	2.52 MHz	0.937	0.50
68.0	2.52 MHz	1.117	0.46

**Note**

<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.

DIMENSIONS in inches [millimeters]		
<b>A</b>	<b>B</b>	<b>C</b>
0.178 ± 0.01 [4.5 ± 0.3]	0.126 ± 0.01 [3.2 ± 0.3]	0.158 ± 0.01 [4.0 ± 0.3]
<b>D</b>	<b>E</b>	<b>F</b>
0.178 [4.5]	0.069 [1.75]	0.059 [1.5]

DESCRIPTION				
<b>IDCP-1813</b>	<b>10 <math>\mu</math>H</b>	<b>± 20 %</b>	<b>ER</b>	<b>e1</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER																		
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">I</td><td style="padding: 2px 5px;">D</td><td style="padding: 2px 5px;">C</td><td style="padding: 2px 5px;">P</td></tr> </table> PRODUCT FAMILY	I	D	C	P	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">1</td><td style="padding: 2px 5px;">8</td><td style="padding: 2px 5px;">1</td><td style="padding: 2px 5px;">3</td></tr> </table> SIZE	1	8	1	3	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">E</td><td style="padding: 2px 5px;">R</td></tr> </table> PACKAGE CODE	E	R	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">1</td><td style="padding: 2px 5px;">0</td><td style="padding: 2px 5px;">0</td></tr> </table> INDUCTANCE VALUE	1	0	0	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">M</td></tr> </table> INDUCTANCE TOLERANCE	M
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1	8	1	3															
E	R																	
1	0	0																
M																		



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