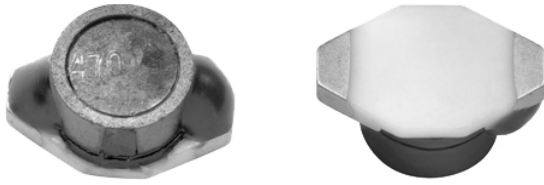




**THE DATASHEET OF  
IDCS2512ER100M**



## High Current, Surface Mount Inductors - Shielded



### FEATURES

- High energy storage
- Low resistance
- Magnetically shielded
- Tape and reel packaging for automatic handling
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0  $\mu\text{H}$  to 10 000  $\mu\text{H}$ , tested at 0.1  $V_{\text{RMS}}$

**Inductance Tolerance:** 20 %, tighter tolerance available upon request

**Operating Temperature:** -40 °C to +125 °C

**Resistance to Solder Heat:** 260 °C for 10 s

### MECHANICAL SPECIFICATIONS

**Core:** ferrite

**Wire:** enamelled copper wire

**Base:** ceramic

**Terminals:** gold over nickel

**Adhesive:** epoxy resin

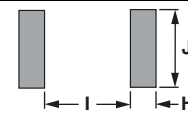
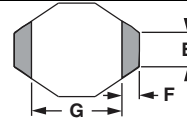
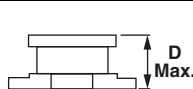
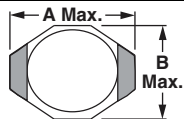
### STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE ( $\mu\text{H}$ )	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (A) <sup>(1)</sup>
1.0	$\pm 20\%$	100	0.040	3.0
1.5	$\pm 20\%$	100	0.045	2.8
2.2	$\pm 20\%$	100	0.050	1.8
3.3	$\pm 20\%$	100	0.055	1.6
4.7	$\pm 20\%$	100	0.060	1.4
6.8	$\pm 20\%$	100	0.065	1.2
10	$\pm 20\%$	100	0.075	1.0
15	$\pm 20\%$	100	0.090	0.80
22	$\pm 20\%$	100	0.11	0.70
33	$\pm 20\%$	100	0.19	0.60
47	$\pm 20\%$	100	0.23	0.50
68	$\pm 20\%$	100	0.29	0.40
100	$\pm 20\%$	100	0.48	0.30
150	$\pm 20\%$	100	0.59	0.26
220	$\pm 20\%$	100	0.90	0.22
330	$\pm 20\%$	100	1.4	0.20
470	$\pm 20\%$	100	1.8	0.19
680	$\pm 20\%$	100	2.2	0.18
1000	$\pm 20\%$	100	3.4	0.15
1500	$\pm 20\%$	100	4.2	0.12
2200	$\pm 20\%$	100	8.5	0.10
3300	$\pm 20\%$	100	11.0	0.08
4700	$\pm 20\%$	100	13.9	0.06
6800	$\pm 20\%$	100	25.0	0.04
10 000	$\pm 20\%$	100	32.8	0.02

**Note**

<sup>(1)</sup> 40 °C temperature rise

### DIMENSIONS in inches [millimeters]



A (Max.)	B (Max.)	D (Max.)	E	F	G	H	I	J
0.260 [6.60]	0.175 [4.45]	0.115 [2.92]	0.050 [1.27]	0.040 [1.02]	0.170 [4.32]	0.055 [1.40]	0.160 [4.06]	0.140 [3.56]

### DESCRIPTION

<b>IDCS-2512</b>	<b>10 <math>\mu\text{H}</math></b>	<b><math>\pm 20\%</math></b>	<b>ER</b>	<b>e4</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

I	D	C	S	2	5	1	2	E	R	1	0	0	M
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE



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