



**THE DATASHEET OF  
IDCS7328ER331M**



## 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:** 10  $\mu$ H to 1000  $\mu$ H, tested at 0.1  $V_{RMS}$   
**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:** LCP  
**Terminals:** nickel bronze  
**Adhesive:** epoxy resin

STANDARD ELECTRICAL SPECIFICATIONS					
INDUCTANCE ( $\mu$ H)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. ( $\Omega$ )	$I_{SAT}$ (A)	$I_{RMS}$ (A)
10	$\pm 20$ %	100	0.040	8.0	3.9
15	$\pm 20$ %	100	0.048	7.0	3.4
22	$\pm 20$ %	100	0.059	6.0	3.1
33	$\pm 20$ %	100	0.075	5.0	2.8
47	$\pm 20$ %	100	0.097	4.0	2.4
68	$\pm 20$ %	100	0.138	3.0	2.0
100	$\pm 20$ %	100	0.207	2.4	1.7
150	$\pm 20$ %	100	0.293	2.1	1.3
220	$\pm 20$ %	100	0.47	1.9	1.1
330	$\pm 20$ %	100	0.78	1.1	0.86
470	$\pm 20$ %	100	1.08	1.1	0.73
680	$\pm 20$ %	100	1.40	0.96	0.64
1000	$\pm 20$ %	100	2.01	0.80	0.53

#### Notes

- Inductance drop = 10 % typ. at  $I_{SAT}$
- $\Delta T = 40$  °C typ. at  $I_{RMS}$

DIMENSIONS in inches [millimeters]								
A (Max.)	B (Max.)	D (Max.)	E	F	G	H	I	J
0.730 [18.54]	0.600 [15.24]	0.300 [7.62]	0.100 [2.54]	0.100 [2.54]	0.500 [12.70]	0.115 [2.92]	0.490 [12.45]	0.110 [2.79]

DESCRIPTION				
<b>IDCS-7328</b>	<b>10 <math>\mu</math>H</b>	<b><math>\pm 20</math> %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER													
I	D	C	S	7	3	2	8	E	R	1	0	0	M
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE



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