



## High Current, Shielded, Surface Mount Inductor



### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0  $\mu$ H to 10 000  $\mu$ H, tested at 1.0 Vrms  
**Inductance Tolerance:** 20 %, tighter tolerances available upon request

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

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

### FEATURES

- High energy storage
- Low resistance
- Magnetically shielded
- Tape and reel packaging for automatic handling
- 100 % lead (Pb)-free and RoHS compliant



**RoHS**  
COMPLIANT

### MATERIALS

**Core:** Ferrite  
**Wire:** Enamelled copper wire  
**Base:** Ceramic  
**Terminal:** Gold over Nickel  
**Adhesive:** Epoxy resin

### STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE ( $\mu$ H)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAXIMUM (Ohms)	RATED DC CURRENT* (Amps)
1.0	± 20 %	100	0.040	3.0
1.5	± 20 %	100	0.045	2.8
2.2	± 20 %	100	0.050	1.8
3.3	± 20 %	100	0.055	1.6
4.7	± 20 %	100	0.060	1.4
6.8	± 20 %	100	0.065	1.2
10	± 20 %	100	0.075	1.0
15	± 20 %	100	0.090	0.80
22	± 20 %	100	0.11	0.70
33	± 20 %	100	0.19	0.60
47	± 20 %	100	0.23	0.50
68	± 20 %	100	0.29	0.40
100	± 20 %	100	0.48	0.30
150	± 20 %	100	0.59	0.26
220	± 20 %	100	0.77	0.22
330	± 20 %	100	1.4	0.20
470	± 20 %	100	1.8	0.19
680	± 20 %	100	2.2	0.18
1000	± 20 %	100	3.4	0.15
1500	± 20 %	100	4.2	0.12
2200	± 20 %	100	8.5	0.10
3300	± 20 %	100	11.0	0.08
4700	± 20 %	100	13.9	0.06
6800	± 20 %	100	25.0	0.04
10 000	± 20 %	100	32.8	0.02

\* 30 °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

IDCS-2512	10 $\mu$ H	20 %	ER	e4
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
MODEL				SIZE				PACKAGE CODE				INDUCTANCE VALUE	
												INDUCTANCE TOLERANCE	





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