

# High Current, Shielded, Surface Mount Inductor



### FEATURES

- High energy storage.
- Low resistance.
- Magnetically shielded.
- Tape and reel packaging for automatic handling.

### ELECTRICAL SPECIFICATIONS

**Inductance Range:** 1.0 $\mu$ H to 10,000 $\mu$ H, tested at 1.0Vrms.

**Inductance Tolerance:** 20%, tighter tolerances available upon request.

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

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

### MATERIALS

**Core:** Ferrite.

**Wire:** Enamelled copper wire.

**Base:** Ceramic.

**Terminal:** Gold over Nickel.

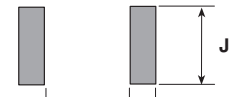
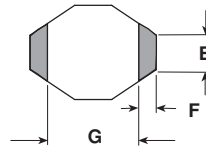
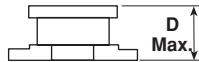
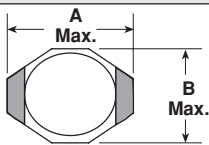
**Adhesive:** Epoxy resin.

### STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE ( $\mu$ H)	TOLERANCE	TEST FREQUENCY L (KHz)	DCR MAXIMUM (Ohms)	RATED DC CURRENT* (Amps)
1.0	$\pm 20\%$	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	0.77	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

\*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  
MODEL

10 $\mu$ H  
INDUCTANCE VALUE

$\pm 20\%$   
INDUCTANCE TOLERANCE

### SAP PART NUMBERING GUIDELINES (INTERNAL)

I D C S  
PRODUCT FAMILY

2 5 1 2  
SIZE

N B  
PACKAGE CODE

1 0 0  
INDUCTANCE VALUE

M  
TOL.

See the end of this data book for conversion tables