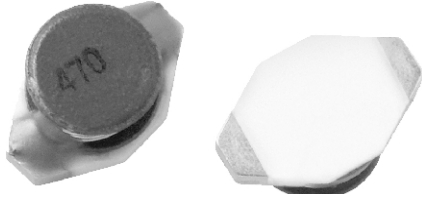


# High Current, Surface Mount Inductors - Non-Shielded



## FEATURES

- High energy storage
- Low resistance
- 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 1000  $\mu\text{H}$ , tested at 1.0  $V_{\text{RMS}}$   
**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. ( $\Omega$ )	$I_{\text{SAT}}$ (A)	$I_{\text{RMS}}$ (A)
1.0	$\pm 20\%$	100	0.05	2.9	2.9
1.5	$\pm 20\%$	100	0.05	2.6	2.8
2.2	$\pm 20\%$	100	0.07	2.3	2.4
3.3	$\pm 20\%$	100	0.08	2.0	2.0
4.7	$\pm 20\%$	100	0.09	1.5	1.5
6.8	$\pm 20\%$	100	0.13	1.2	1.4
10	$\pm 20\%$	100	0.16	1.1	1.1
15	$\pm 20\%$	100	0.23	0.90	1.2
22	$\pm 20\%$	100	0.37	0.70	0.80
33	$\pm 20\%$	100	0.51	0.58	0.60
47	$\pm 20\%$	100	0.64	0.50	0.50
68	$\pm 20\%$	100	0.86	0.40	0.40
100	$\pm 20\%$	100	1.27	0.31	0.30
150	$\pm 20\%$	100	2.00	0.27	0.25
220	$\pm 20\%$	100	3.11	0.22	0.20
330	$\pm 20\%$	100	3.80	0.18	0.16
470	$\pm 20\%$	100	5.06	0.16	0.15
680	$\pm 20\%$	100	9.20	0.14	0.12
1000	$\pm 20\%$	100	13.8	0.10	0.07

### Notes

- Inductance drop = 10 % typ. at  $I_{\text{SAT}}$
- $\Delta T = 15$  °C typ. at  $I_{\text{RMS}}$

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				
IDC-2512	10 $\mu\text{H}$	$\pm 20\%$	ER	e4
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER				
I	D	C	2	5
PRODUCT FAMILY			1	2
			E	R
			PACKAGE CODE	
			1	0
			INDUCTANCE VALUE	
				M
				TOL.



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