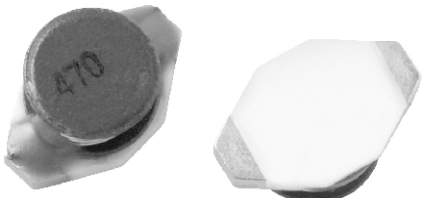
High Current, Surface Mount Inductors - Non-Shielded



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

Pb-free

RoHS COMPLIANT

HALOGEN FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 µH to 1000 µH, tested at 1.0 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: Ceramic

Terminals: Gold over nickel

Adhesive: Epoxy resin

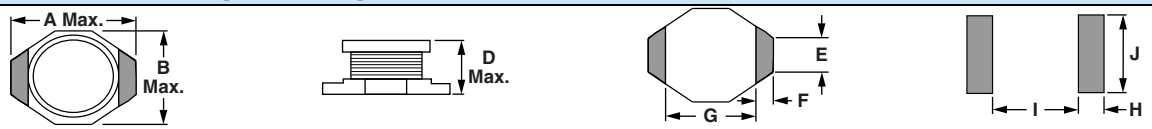
STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE (µH)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. (Ω)	I_{SAT} (A)	I_{RMS} (A)
1.0	± 20 %	100	0.05	2.9	2.9
1.5	± 20 %	100	0.05	2.6	2.8
2.2	± 20 %	100	0.07	2.3	2.4
3.3	± 20 %	100	0.08	2.0	2.0
4.7	± 20 %	100	0.09	1.5	1.5
6.8	± 20 %	100	0.13	1.2	1.4
10	± 20 %	100	0.16	1.1	1.1
15	± 20 %	100	0.23	0.90	1.2
22	± 20 %	100	0.37	0.70	0.80
33	± 20 %	100	0.51	0.58	0.60
47	± 20 %	100	0.64	0.50	0.50
68	± 20 %	100	0.86	0.40	0.40
100	± 20 %	100	1.27	0.31	0.30
150	± 20 %	100	2.00	0.27	0.25
220	± 20 %	100	3.11	0.22	0.20
330	± 20 %	100	3.80	0.18	0.16
470	± 20 %	100	5.06	0.16	0.15
680	± 20 %	100	9.20	0.14	0.12
1000	± 20 %	100	13.8	0.10	0.07

Notes

- Inductance drop = 10 % typ. at I_{SAT}
- ΔT = 15 °C typ. at I_{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 µH	± 20 %	ER	e4
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

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

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