

High Current, Surface Mount Inductor



FEATURES

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

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 μ H to 1000 μ 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 (μ H)	TOLERANCE	TEST FREQUENCY L (KHz)	DCR MAXIMUM (Ohms)	Isat (Amps)	Irms (Amps)
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

Inductance drop = 10% typ. at Isat
 $\Delta T = 15^\circ\text{C}$ typ. at Irms

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	10μH	± 20%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

SAP PART NUMBERING GUIDELINES (INTERNAL)

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

See the end of this data book for conversion tables