

High Current, Surface Mount Inductors - Shielded



FEATURES

- High energy storage
- Low resistance
- Magnetically shielded
- Tape and reel packaging for automatic handling
- Material categorization:
for definitions of compliance please see
www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 μ H to 10 000 μ H, tested at 0.1 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 (μ H)	TOLERANCE	TEST FREQUENCY L (kHz)	DCR MAX. (Ω)	RATED DC CURRENT (A) ⁽¹⁾
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	0.90	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

Note

⁽¹⁾ 40 °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 μH	± 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
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE



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