



IDCP-1813

Vishay Dale

High Current, Surface Mount Inductor



ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0μH to 68μH.

Inductance Tolerance: 20%.

Operating Temperature: - 25°C to + 105°C.

Storage Temperature: - 25°C to 85°C.

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

FEATURES

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

MATERIALS

Core: Ferrite.

Wire: Enamelled copper wire.

Terminal: Ag + Ni + Sn/Pb.

STANDARD ELECTRICAL SPECIFICATIONS

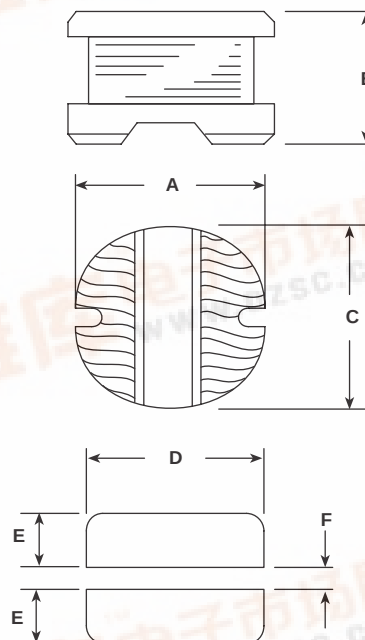
INDUCTANCE (μH)	TEST FREQUENCY L	DCR MAXIMUM (Ohms)	RATED DC CURRENT* (A)
1.0	7.96MHz	0.033	3.80
1.4	7.96MHz	0.038	3.30
1.8	7.96MHz	0.042	2.91
2.2	7.96MHz	0.047	2.60
2.7	7.96MHz	0.052	2.43
3.3	7.96MHz	0.058	2.15
3.9	7.96MHz	0.076	1.98
4.7	7.96MHz	0.094	1.70
5.6	7.96MHz	0.101	1.60
6.8	7.96MHz	0.117	1.41
8.2	7.96MHz	0.132	1.26
10.0	2.52MHz	0.182	1.15
12.0	2.52MHz	0.210	1.05
15.0	2.52MHz	0.235	0.92
18.0	2.52MHz	0.338	0.84
22.0	2.52MHz	0.378	0.76
27.0	2.52MHz	0.522	0.71
33.0	2.52MHz	0.540	0.64
39.0	2.52MHz	0.587	0.59
47.0	2.52MHz	0.844	0.54
56.0	2.52MHz	0.937	0.50
68.0	2.52MHz	1.117	0.46

*Rated Current: Value obtained when current flows and the temperature has risen 40°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

DESCRIPTION

IDCP-1813	10μH	±20%
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE

DIMENSIONS in inches [millimeters]



TYPICAL PAD LAYOUT

A	B	C
0.178 ± 0.01 [4.5 ± 0.3]	0.126 ± 0.01 [3.2 ± 0.3]	0.158 ± 0.01 [4.0 ± 0.3]
D	E	F
0.178 [4.5]	0.069 [1.75]	0.059 [1.5]

SAP PART NUMBERING GUIDELINES (INTERNAL)

I	D	C	P	1	8	1	3	N	B	1	0	0	M
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

See the end of this data book for conversion tables