



IDCP-3916

Vishay Dale

## High Current, Surface Mount Inductor



### FEATURES

- High energy storage
- Low resistance
- Tape and reel packaging for automatic handling
- 100 % lead (Pb)-free and RoHS compliant

RoHS  
COMPLIANT

### ELECTRICAL SPECIFICATIONS

Inductance Range: 10.0  $\mu$ H to 560  $\mu$ H

Inductance Tolerance: 20 %

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

Storage Temperature: - 40 °C to 125 °C

Resistance to Solder Heat: 260 °C for 10 seconds

#### STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE ( $\mu$ H)	TEST FREQUENCY L	DCR MAXIMUM (Ohms)	RATED DC CURRENT* (A)
10.0	2.52 MHz	0.05	2.38
12.0	2.52 MHz	0.06	2.13
15.0	2.52 MHz	0.07	1.87
18.0	2.52 MHz	0.08	1.73
22.0	2.52 MHz	0.09	1.60
27.0	2.52 MHz	0.10	1.44
33.0	2.52 MHz	0.12	1.26
39.0	2.52 MHz	0.15	1.20
47.0	2.52 MHz	0.17	1.10
56.0	2.52 MHz	0.20	1.01
68.0	2.52 MHz	0.22	0.91
82.0	2.52 MHz	0.25	0.85
100.0	1 kHz	0.34	0.74
120.0	1 kHz	0.40	0.69
150.0	1 kHz	0.54	0.61
180.0	1 kHz	0.62	0.56
220.0	1 kHz	0.72	0.53
270.0	1 kHz	0.95	0.45
330.0	1 kHz	1.10	0.42
390.0	1 kHz	1.24	0.38
470.0	1 kHz	1.53	0.35
560.0	1 kHz	1.90	0.32

\*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.

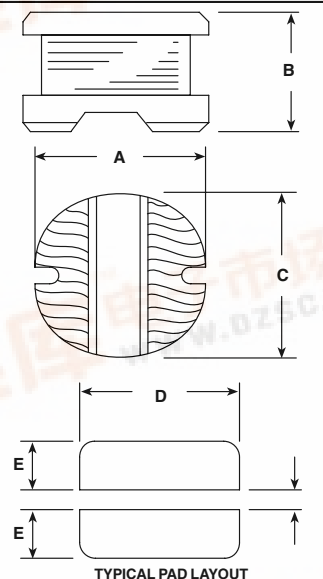
### MATERIALS

Core: Ferrite

Wire: Enamelled copper wire

Terminal: Ni + Sn/Ag/Cu

#### DIMENSIONS in inches [millimeters]



A	B	C
0.394 $\pm$ 0.01 [10.0 $\pm$ 0.3]	0.158 $\pm$ 0.02 [4.0 $\pm$ 0.5]	0.355 $\pm$ 0.01 [9.0 $\pm$ 0.3]
D	E	F
0.374 [9.5]	0.148 [3.75]	0.099 [2.5]

#### DESCRIPTION

IDCP-3916	10 $\mu$ H	$\pm$ 20 %	ER	e1
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

#### GLOBAL PART NUMBER

I	D	C	P	3	9	1	6	E	R	1	0	0	M
MODEL				SIZE				PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE



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