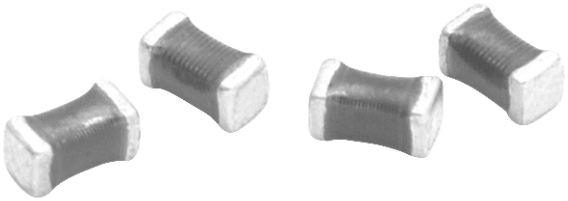
IMC-0603

Vishay Dale

High Frequency, Surface Mount, Laser Spiral Coated Inductors



FEATURES

- Very small in size
- High self-resonant frequency values
- High Q values relative to size at higher frequencies
- Coated coil provides protection and moisture resistance
- Compatible with vapor phase and infrared reflow soldering
- Tape and reel packaging for automatic handling, 3000/reel, EIA-481
- L and Q value not affected by mounting orientation
- 100 % lead (Pb)-free and RoHS compliant

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 nH to 220 nH
Inductance Tolerance: ± 0.3 nH for 1.0 - 3.3 nH
± 5 % for 3.9 nH to 220 nH
Operating Temperature: - 40 °C to + 100 °C Core
Material: Ceramic

TEST EQUIPMENT

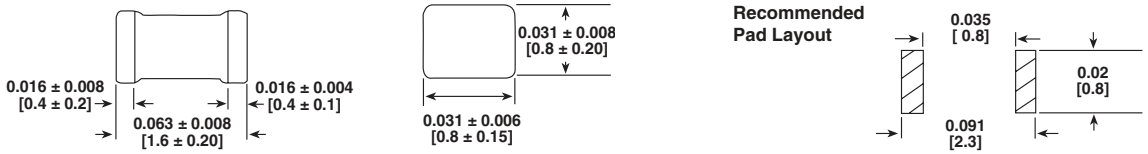
- Inductance and Q measured on HP4291B
- SRF measured on HP8753E
- DCR measured on HP4338B

STANDARD ELECTRICAL SPECIFICATIONS

INDUCTANCE (nH)	TOLERANCE	TEST FREQ. L (MHz)	Q MINIMUM	TEST FREQ. Q (MHz)	SELF-RESONANT FREQ. MIN. (MHz)	DCR MAXIMUM (Ohms)	RATED DC CURRENT * (mA)
1.0	± 0.3 nH, 0.2 nH	100	30	1000	6000	0.06	500
1.2	± 0.3 nH, 0.2 nH	100	30	1000	6000	0.06	500
1.5	± 0.3 nH, 0.2 nH	100	30	1000	6000	0.07	500
1.8	± 0.3 nH, 0.2 nH	100	30	1000	6000	0.08	500
2.2	± 0.3 nH, 0.2 nH	100	30	1000	6000	0.09	500
2.7	± 0.3 nH, 0.2 nH	100	30	1000	6000	0.10	500
3.3	± 0.3 nH, 0.2 nH	100	30	1000	5500	0.12	500
3.9	± 5 %	100	30	1000	5500	0.15	450
4.7	± 5 %	100	30	1000	4800	0.17	450
5.6	± 5 %	100	30	1000	4600	0.18	430
6.8	± 5 %	100	30	1000	3550	0.20	430
8.2	± 5 %	100	30	1000	3500	0.28	400
10	± 5 %, 2 %	100	30	500	2800	0.32	400
12	± 5 %, 2 %	100	30	500	2800	0.35	400
15	± 5 %, 2 %	100	30	500	2500	0.41	350
18	± 5 %, 2 %	100	30	500	2300	0.45	350
22	± 5 %, 2 %	100	30	500	2000	0.50	300
27	± 5 %, 2 %	100	30	500	2000	0.55	300
33	± 5 %, 2 %	100	30	500	1800	0.60	300
39	± 5 %, 2 %	100	30	500	1800	0.80	300
47	± 5 %, 2 %	100	30	500	1800	0.95	250
56	± 5 %, 2 %	100	30	500	1800	1.20	250
68	± 5 %, 2 %	100	30	500	1500	1.30	250
82	± 5 %, 2 %	100	30	500	1500	1.50	250
100	± 5 %, 2 %	100	26	500	1300	1.80	200
120	± 5 %, 2 %	100	26	500	1200	3.00	130
150	± 5 %, 2 %	100	26	500	1100	4.50	100
180	± 5 %, 2 %	100	20	500	1000	6.5	80
220	± 5 %, 2 %	100	20	500	900	7.5	70

*Value obtained when current flows and the temperature has risen 15 °C

DIMENSIONS in inches [millimeters]



DESCRIPTION

IMC-0603	10 nH	± 5 %	ER	e4
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	C	0	6	0	3	E	R	1	0	N	J
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

For technical questions, contact: magnetics@vishay.com

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