VISHAY
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IMC-0402

Vishay Dale

High Frequency, Surface Mount, Laser Spiral, Coated Inductors

FEATURES

- Very small 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, 10 000/reel, EIA-481
- L and Q value not affected by mounting orientation
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE

STANDARD ELECTRICAL SPECIFICATIONS

IND. (nH)	TOL.	TEST FREQ. (MHz) L	TEST FREQ. (MHz) Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) (1)
1.0	0.3 nH, 0.2 nH	100	800	21	6000	0.05	400
1.2	0.3 nH, 0.2 nH	100	800	21	6000	0.06	400
1.5	0.3 nH, 0.2 nH	100	800	21	6000	0.07	400
1.8	0.3 nH, 0.2 nH	100	800	21	6000	0.08	400
2.2	0.3 nH, 0.2 nH	100	800	21	6000	0.09	400
2.7	0.3 nH, 0.2 nH	100	800	21	5500	0.10	400
3.3	0.3 nH, 0.2 nH	100	800	21	5500	0.12	400
3.9	0.3 nH, 0.2 nH	100	800	20	5200	0.15	360
4.7	0.3 nH, 0.2 nH	100	800	20	4800	0.17	360
5.6	0.3 nH, 0.2 nH	100	800	20	4600	0.19	340
6.8	5 %	100	800	19	4000	0.30	320
8.2	5 %	100	800	19	3500	0.35	320
10	5 %, 2 %	100	800	19	2800	0.41	320
12	5 %, 2 %	100	800	19	2800	0.45	320
15	5 %, 2 %	100	800	19	2500	0.60	240
18	5 %, 2 %	100	800	19	2200	0.70	240
22	5 %, 2 %	100	800	19	2000	0.80	200
27	5 %, 2 %	100	800	19	1800	1.20	200
33	5 %, 2 %	100	800	18	1800	1.40	170
39	5 %, 2 %	100	800	18	1800	1.70	150
47	5 %, 2 %	100	800	17	1800	2.10	140
56	5 %, 2 %	100	800	17	1500	2.50	130
68	5 %, 2 %	100	800	15	1500	4.00	120
82	5 %, 2 %	100	800	15	1400	4.50	110
100	5 %, 2 %	100	800	14	1200	5.50	90

Note

(1) Value obtained when current flows and temperature has risen 15 °C

ELECTRICAL SPECIFICATIONS

Inductance Range: 1.0 nH to 100 nH

Inductance and Tolerance: ± 0.3 nH for 1.0 nH to 5.6 nH, ± 5 % for 6.8 nH to 100 nH

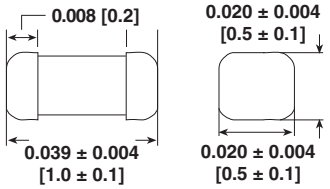
Operating Temperature: -40 °C to +100 °C

Core Material: Ceramic

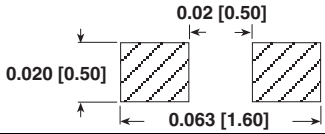
TEST EQUIPMENT

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

DIMENSIONS in inches [millimeters]



Solder Pad Layout



DESCRIPTION

IMC-0402	10 nH	± 5 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	M	C	0	4	0	2	E	R	1	0	N	J
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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Mouser Electronics

Authorized Distributor

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