

IMC-0603-01

Vishay Dale



Surface Mount Inductor, Wirewound



FEATURES

- Excellent solderability and resistance to soldering heat
- Suitable for reflow soldering
- High reliability and easy surface mount assembly
- Wide range of inductance values available
- Tape and reel packaging for automatic handling, 3000/reel, EIA 481
- Lead (Pb)-free construction

RoHS
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

IND. (nH)	TOL.	TEST FREQ L and Q (MHz)	Q MIN	SELF- RESONANT FREQ. MIN. (MHz)	DCR MAX. (Ohms)	*RATED DC CURRENT (mA)
2.0	± 0.3 nH, 0.2 nH	250	16	6900	0.08	700
3.9	± 0.3 nH, 0.2 nH	250	22	6900	0.08	700
4.7	± 0.3 nH, 0.2 nH	250	20	5800	0.11	700
6.8	± 10 %, 5 %	250	30	5800	0.11	700
8.2	± 10 %, 5 %	250	30	4600	0.10	700
10.0	± 5 %, 2 %	250	30	4800	0.13	700
12.0	± 5 %, 2 %	250	35	4000	0.13	700
15.0	± 5 %, 2 %	250	35	4000	0.17	700
18.0	± 5 %, 2 %	250	38	3100	0.17	700
22.0	± 5 %, 2 %	250	38	3000	0.22	700
27.0	± 5 %, 2 %	250	40	2800	0.22	600
33.0	± 5 %, 2 %	250	43	2300	0.22	600
39.0	± 5 %, 2 %	250	43	2200	0.25	600
47.0	± 5 %, 2 %	200	40	2000	0.28	600
56.0	± 5 %, 2 %	200	40	1900	0.31	600
68.0	± 5 %, 2 %	200	40	1700	0.34	600
72.0	± 5 %, 2 %	150	35	1700	0.49	400
82.0	± 5 %, 2 %	150	35	1700	0.54	400
100.0	± 5 %, 2 %	150	35	1400	0.63	400
120.0	± 5 %, 2 %	150	35	1300	0.65	300
150.0	± 5 %, 2 %	150	35	1000	0.92	280
180.0	± 5 %, 2 %	100	30	1000	1.25	240
220.0	± 5 %, 2 %	100	30	1000	1.70	200
270.0	± 5 %, 2 %	100	30	1000	1.80	170

* for a 15 °C rise.

ELECTRICAL SPECIFICATIONS

Inductance Range: 2 nH to 270 nH

Operating Temperature: - 40 °C to + 125 °C

Storage Temperature: - 40 °C to + 125 °C

TEST EQUIPMENT

- Inductance is measured in HP-4287A RF LCR meter with HP-16193 fixture
- Q is measured in HP-4287A RF LCR meter with HP-16193 fixture
- SRF is measured in HP-8753E RF network analyzer
- DCR is measured in HP-4338B milliohmmeter

DIMENSIONS in inches [millimeters]

L	W	S
0.063 ± 0.008 [1.60 ± 0.2]	0.041 ± 0.008 [1.05 ± 0.2]	0.014 ± 0.004 [0.35 ± 0.1]
U	T	
0.02 ref. [0.5]	0.041 ± 0.008 [1.05 ± 0.2]	

DESCRIPTION

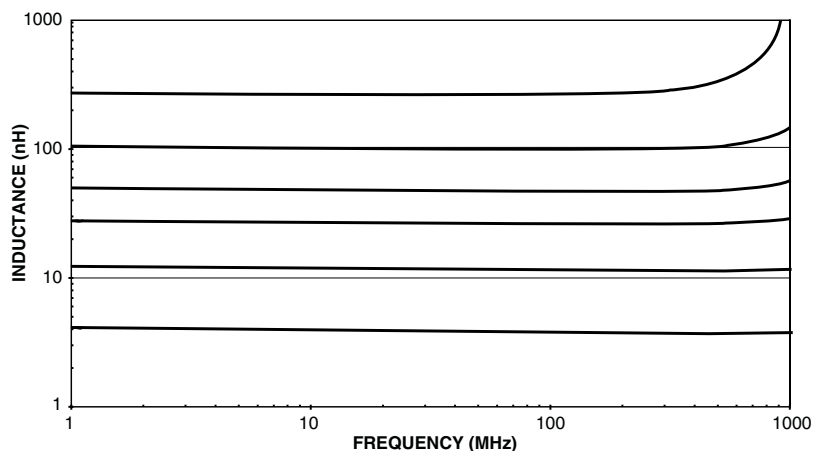
IMC-0603-01 MODEL	10 nH INDUCTANCE VALUE	± 5 % INDUCTANCE TOLERANCE	ER PACKAGE CODE	e4 JEDEC LEAD (Pb)-FREE STANDARD
GLOBAL PART NUMBER				
I	M	C	0	6
0	6	0	3	E
R	1	0	N	J
0	1			
PRODUCT FAMILY				
SIZE				
PACKAGE CODE				
INDUCTANCE VALUE				
TOL.				
SERIES				



PERFORMANCE GRAPHS

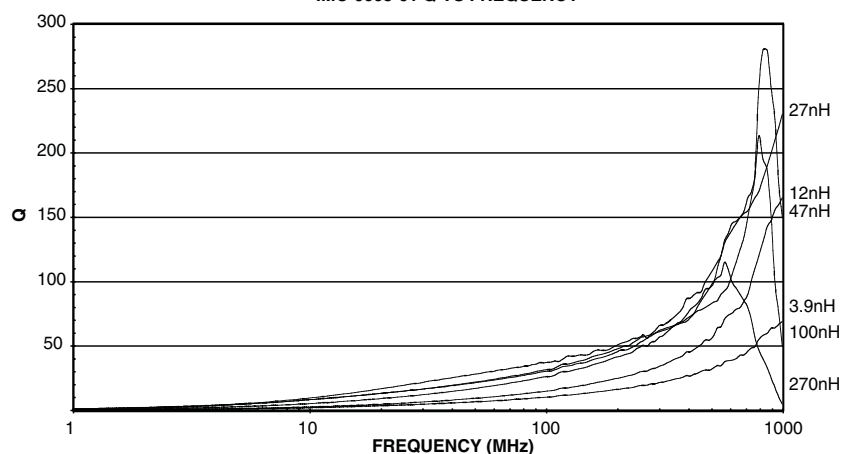
IMC-0603-01

IMC-0603-01 Ls VS FREQUENCY



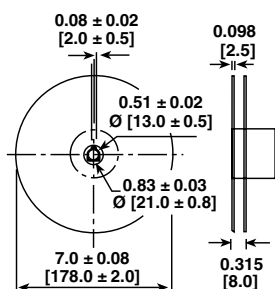
IMC-0603-01

IMC-0603-01 Q VS FREQUENCY

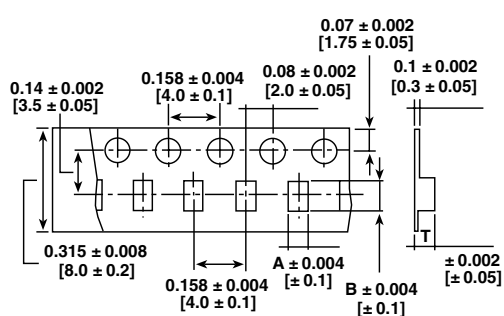


TAPE AND REEL SPECIFICATIONS in inches [millimeters]

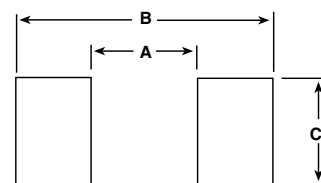
REEL DIMENSIONS



TAPE DIMENSIONS



RECOMMENDED PATTERN



MODEL	UNITS PER REEL	MODEL	A	B	T	MODEL	A	B	C
IMC-0603-01	3000	IMC-0603-01	0.039 [1.0]	0.07 [1.8]	0.039 [1.0]	IMC-0603-01	0.039 [1.0]	0.083 [2.1]	0.03 [0.8]



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