



**THE DATASHEET OF  
IMC0603ER10NJ01**



## Wirewound, Surface Mount Inductors



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### 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
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

### 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 HP4287A RF LCR meter with HP16193 fixture
- Q is measured in HP4287A RF LCR meter with HP16193 fixture
- SRF is measured in HP8753E RF network analyzer
- DCR is measured in HP4338B milliohmeter

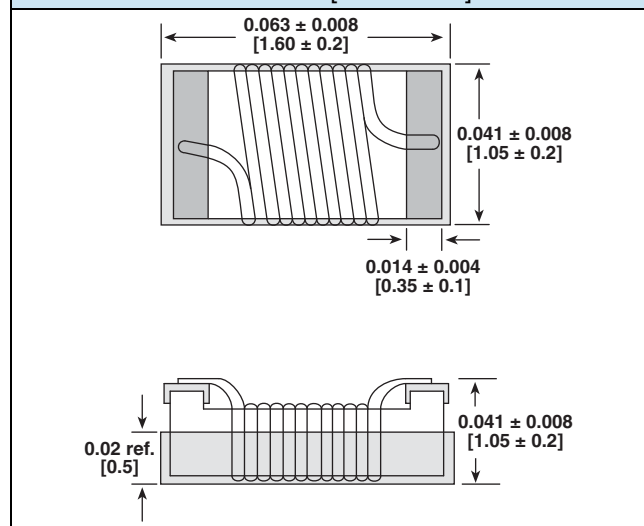
### STANDARD ELECTRICAL SPECIFICATIONS

IND. (nH)	TOL.	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) <sup>(1)</sup>
		L & Q				
2.0	0.3 nH, 0.2 nH	250	16	6900	0.08	700
3.9	0.3 nH, 0.2 nH	250	20	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	5 %, 2 %	250	30	4800	0.13	700
12	5 %, 2 %	250	35	4000	0.13	700
15	5 %, 2 %	250	35	4000	0.17	700
18	5 %, 2 %	250	38	3100	0.17	700
22	5 %, 2 %	250	38	3000	0.22	700
27	5 %, 2 %	250	40	2800	0.22	600
33	5 %, 2 %	250	43	2300	0.22	600
39	5 %, 2 %	250	43	2200	0.25	600
47	5 %, 2 %	200	40	2000	0.28	600
56	5 %, 2 %	200	40	1900	0.31	600
68	5 %, 2 %	200	40	1700	0.34	600
72	5 %, 2 %	150	35	1700	0.49	400
82	5 %, 2 %	150	35	1700	0.54	400
100	5 %, 2 %	150	35	1400	0.63	400
120	5 %, 2 %	150	35	1300	0.65	300
150	5 %, 2 %	150	35	1000	0.92	280
180	5 %, 2 %	100	30	1000	1.25	240
220	5 %, 2 %	100	30	1000	1.70	200
270	5 %, 2 %	100	30	1000	1.80	170
330	5 %	100	25	450	2.00	150
390	5 %	100	20	350	2.00	170

#### Note

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

### DIMENSIONS in inches [millimeters]

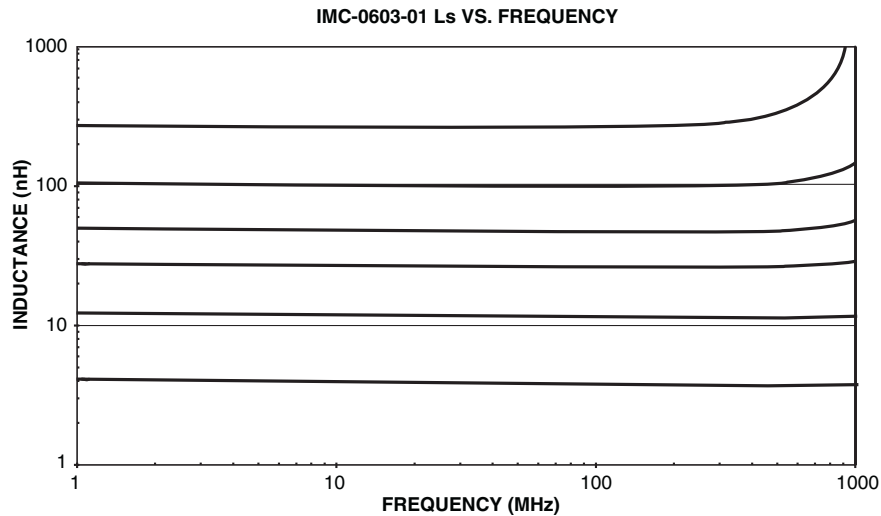
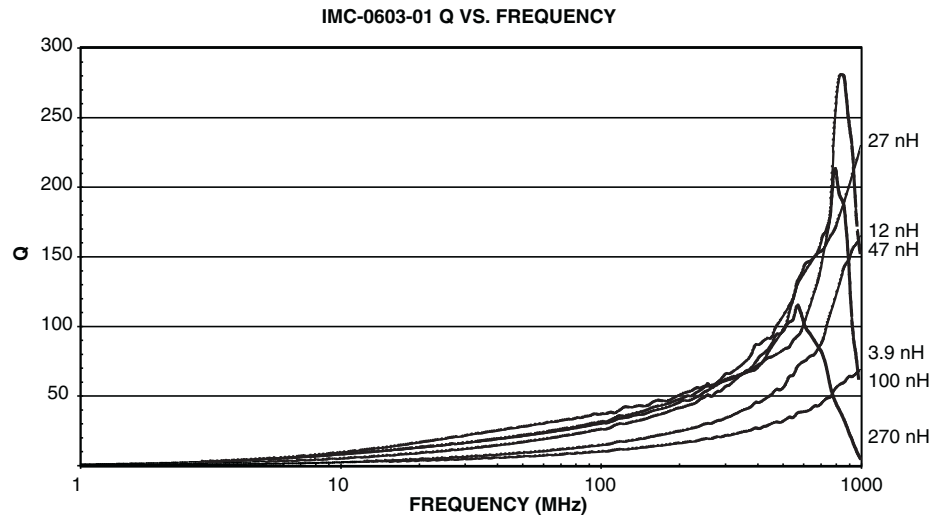


### DESCRIPTION

<b>IMC-0603-01</b>	<b>10 nH</b>	<b>± 5 %</b>	<b>ER</b>	<b>e4</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

### GLOBAL PART NUMBER

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

**PERFORMANCE GRAPHS (IMC-0603-01)**

**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]	0.070 [1.8]	0.039 [1.0]	IMC-0603-01	0.025 [0.64]	0.075 [1.92]	0.040 [1.02]



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