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Wirewound, Surface Mount Inductors



	ST	ANDARD EL	.ECTR	SPECIFICATIONS				
TOL. L & Q MIN. A A A 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 0.17 700 18 5 %, 2 % 250 38 3100 0.17 700 22 5 %, 2 % 250 43 2300 0.22 600 33 5 %, 2 % 250 43 2300 0.22 600 39 5 %, 2 % 200 40 2000 0.28 600 <			FREQ. (MHz)		MIN.	MAX.	RATED DC CURRENT (mA) ⁽¹⁾	
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 0.17 700 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 43 2300 0.22 600 33 $5%, 2%$ 250 43 2200 0.25 600 39 $5%, 2%$ 200 40 1900 0.31 600 68 $5%, 2%$ 200 40 1900 0.31 600 68 $5%, 2%$ 150 35 1700 0.49 400 82 $5%, 2%$ 150 35 1400 0.63 400 100 $5%, 2%$ 150 35 1300 0.65 300 150 $5%, 2%$ 150 35 1000 0.92 280		_			• •	. ,		
4.70.3 nH, 0.2 nH2502058000.117006.810 %, 5 %2503058000.117008.210 %, 5 %2503046000.10700105 %, 2 %2503048000.13700125 %, 2 %2503540000.17700155 %, 2 %2503540000.17700185 %, 2 %2503831000.17700225 %, 2 %2503830000.22700275 %, 2 %2504323000.22600335 %, 2 %2504320000.28600395 %, 2 %2004019000.31600685 %, 2 %2004017000.34600725 %, 2 %1503517000.49400825 %, 2 %1503513000.653001005 %, 2 %1503513000.653001205 %, 2 %1503510000.92280		,		-				
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 12 $5 %, 2 %$ 250 35 4000 0.17 700 15 $5 %, 2 %$ 250 38 3100 0.17 700 18 $5 %, 2 %$ 250 38 3000 0.22 700 27 $5 %, 2 %$ 250 43 2300 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 1900 0.31 600 56 $5 %, 2 %$ 200 40 1900 0.34 600 72 $5 %, 2 %$ 150 35 1700 0.49 400 82 $5 %, 2 %$ 150 35 1400 0.63 400 100 $5 %, 2 %$ 150 35 1300 0.65 300 150 $5 %, 2 %$ 150 35 1000 0.92 280		,		-				
8.210 %, 5 %2503046000.10700105 %, 2 %2503048000.13700125 %, 2 %2503540000.13700155 %, 2 %2503540000.17700185 %, 2 %2503831000.17700225 %, 2 %2503830000.22700275 %, 2 %2504028000.22600335 %, 2 %2504323000.22600395 %, 2 %2504320000.28600565 %, 2 %2004019000.31600685 %, 2 %2004017000.34600725 %, 2 %1503517000.49400825 %, 2 %1503513000.653001005 %, 2 %1503513000.653001505 %, 2 %1503510000.92280		,				-		
10 $5\ \%, 2\ \%$ 250 30 4800 0.13 700 12 $5\ \%, 2\ \%$ 250 35 4000 0.13 700 15 $5\ \%, 2\ \%$ 250 35 4000 0.13 700 15 $5\ \%, 2\ \%$ 250 35 4000 0.17 700 18 $5\ \%, 2\ \%$ 250 38 3100 0.17 700 22 $5\ \%, 2\ \%$ 250 38 3000 0.22 600 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 $5\ \%, 2\ \%$ 150 35 1700 0.49 400 82 $5\ \%, 2\ \%$ 150 35 1400 0.63 400 100 $5\ \%, 2\ \%$ 150 35 1300 0.65 300 150 $5\ \%, 2\ \%$ 150 35 1000 0.92 280						-		
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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 1400 0.63 400 100 $5\ \%, 2\ \%$ 150 35 1300 0.65 300 150 $5\ \%, 2\ \%$ 150 35 1000 0.92 280		-						
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 1400 0.63 400 100 $5\ \%, 2\ \%$ 150 35 1300 0.65 300 150 $5\ \%, 2\ \%$ 150 35 1000 0.92 280	-	5 %, 2 %	250		4000	0.17	700	
27 $5 \%, 2 \%$ 2504028000.2260033 $5 \%, 2 \%$ 2504323000.2260039 $5 \%, 2 \%$ 2504322000.2560047 $5 \%, 2 \%$ 2004020000.2860056 $5 \%, 2 \%$ 2004019000.3160068 $5 \%, 2 \%$ 2004017000.3460072 $5 \%, 2 \%$ 1503517000.4940082 $5 \%, 2 \%$ 1503514000.63400100 $5 \%, 2 \%$ 1503513000.65300150 $5 \%, 2 \%$ 1503510000.92280	-	5 %, 2 %				0.17		
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	22	5 %, 2 %	250	38	3000	0.22	700	
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	27	5 %, 2 %	250	40	2800	0.22	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	33	5 %, 2 %	250	43	2300	0.22	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	39	5 %, 2 %	250	43	2200	0.25	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	47	5 %, 2 %	200	40	2000	0.28	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	56	5 %, 2 %	200	40	1900	0.31	600	
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	68	5 %, 2 %	200	40	1700	0.34	600	
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	72	5 %, 2 %	150	35	1700	0.49	400	
120 5 %, 2 % 150 35 1300 0.65 300 150 5 %, 2 % 150 35 1000 0.92 280	82	5 %, 2 %	150	35	1700	0.54	400	
150 5 %, 2 % 150 35 1000 0.92 280	100	5 %, 2 %	150	35	1400	0.63	400	
	120	5 %, 2 %	150	35	1300	0.65	300	
180 5 %, 2 % 100 30 1000 1.25 240	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	220	5 %, 2 %	100	30	1000	1.70	200	
270 5 %, 2 % 100 30 1000 1.80 170	270	5 %, 2 %	100	30	1000	1.80	170	
330 5 % 100 25 450 2.00 150	330	5 %	100	25	450	2.00	150	
390 5 % 100 20 350 2.00 170	390	5 %	100	20	350	2.00	170	

Note

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

SIZE

FEATURES

- Excellent solderability and resistance to soldering heat
- Suitable for reflow soldering
- RoHS • High reliability and easy surface mount COMPLIANT assembly HALOGEN FREE
- Wide range of inductance values available
- GREEN • Tape and reel packaging for automatic (5-2008) handling, 3000/reel EIA 481
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

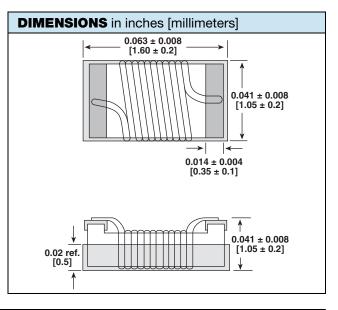
ELECTRICAL SPECIFICATIONS

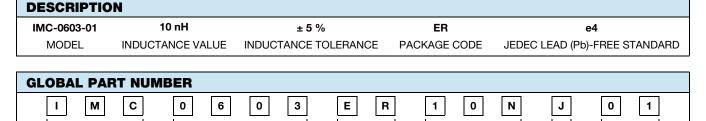
Inductance Range: 2 nH to 270 nH Operating Temperature: -40 °C to +125 °C

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 ismeasured in HP4338B millohmeter





PACKAGE

CODE

Revision: 25-Feb-15

PRODUCT

FAMILY

1

Document Number: 34164

SERIES

TOL

For technical questions, contact: magnetics@vishay.com

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INDUCTANCE

VALUE

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ISHA

IMC-0603-01 Vishay Dale

PERFORMANCE GRAPHS (IMC-0603-01) IMC-0603-01 Q VS. FREQUENCY 300 250 27 nH 200 12 nH 47 nH **O** 150 100 3.9 nH 100 nH 50 270 nH 10 100 1000 1 FREQUENCY (MHz) IMC-0603-01 Ls VS. FREQUENCY 1000 100 (INDUCTANCE (nH) 1 1 10 100 1000 FREQUENCY (MHz)

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$[0.315 \pm 0.008] \longrightarrow A$ $[0.315 \pm 0.008] \longrightarrow A$ $[0.315 \pm 0.008] \longrightarrow A$ $[0.158 \pm 0.004] = 0.158$				RECOMMENDED PATTERN $ \begin{array}{c c} & B & \longrightarrow \\ & \leftarrow & A & \rightarrow \\ & & & & & & \\ & & & & & & \\ & & & &$			
MODEL	UNITS PER REEL	MODEL	Α	В	Т	MODEL	Α	В	С
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]

Revision: 25-Feb-15

2

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