

## Type 3670 Series

### Key Features

- Choice of Four Package Sizes
- Wire Wound Construction
- Smooth Top Aids Placement
- 1.0NH to 4.7mH Value Range
- Laboratory Design Kits Available
- High Q Factor
- High S.R.F.
- Standard Tolerances

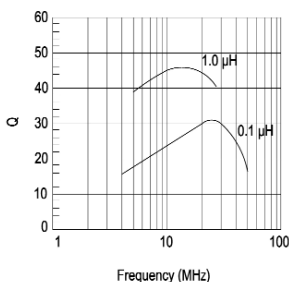


The 3670 series from TE Connectivity is an innovative multilayer inductor capable of filtering. Low dc resistance provides for voltage drop. Board real estate is minimised as 06:03 packaged devices are available. This series has been specifically designed for applications above 100MHz, the multilayer construction combines outstanding reliability, high productivity and ensures excellent product quality suitable for various high frequency circuits.

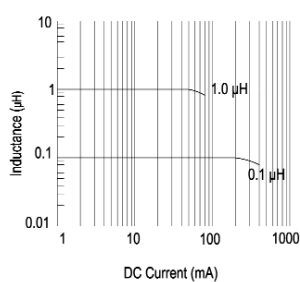
### Characteristics - Electrical - 0603 Package

Inductance Code	Package Marking	Inductance ( $\mu\text{H}$ )	Tolerance	Q Min.	LQ Test Freq. (MHz)	S.R.F. (MHz)	Rdc Max (ohms)	Idc Max. (mA)
47N	None	0.047	10%, 20%	10	50	260	0.30	50
68N	None	0.068	10%, 20%	10	50	250	0.30	50
82N	None	0.082	10%, 20%	10	50	245	0.30	50
R10	None	0.10	10%, 20%	15	25	240	0.50	50
R12	None	0.12	10%, 20%	15	25	205	0.50	50
R15	None	0.15	10%, 20%	15	25	180	0.60	50
R18	None	0.18	10%, 20%	15	25	165	0.60	50
R22	None	0.22	10%, 20%	15	25	150	0.80	50
R27	None	0.27	10%, 20%	15	25	136	0.80	50
R33	None	0.33	10%, 20%	15	25	125	0.85	35
R39	None	0.39	10%, 20%	15	25	110	1.00	35
R47	None	0.47	10%, 20%	15	25	105	1.35	35
R56	None	0.56	10%, 20%	15	25	95	1.55	35
R68	None	0.68	10%, 20%	15	25	90	1.70	35
R82	None	0.82	10%, 20%	15	25	85	2.10	35
1R0	None	1.00	10%, 20%	35	10	75	0.60	25
1R2	None	1.20	10%, 20%	35	10	65	0.80	25
1R5	None	1.50	10%, 20%	35	10	60	0.80	25
1R8	None	1.80	10%, 20%	35	10	55	0.95	25
2R2	None	2.20	10%, 20%	35	10	50	1.15	15
2R7	None	2.70	10%, 20%	35	10	45	1.35	15

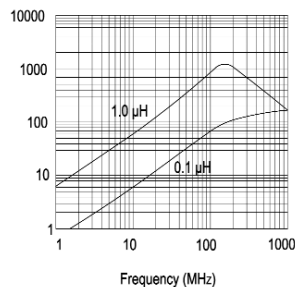
### Characteristics - Q vs Frequency



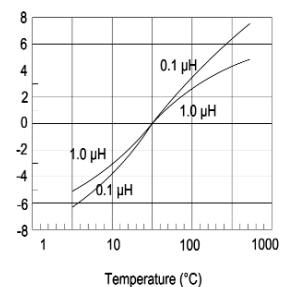
### Inductance vs Current



### Impedance vs Frequency



### Inductance vs Temperature

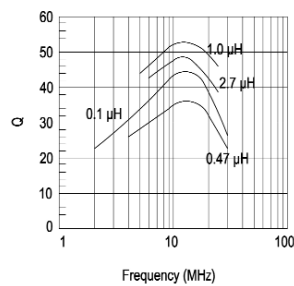


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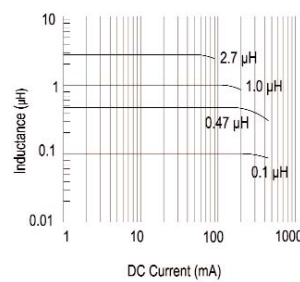
### Characteristics - Electrical - 0805 Package

Inductance Code	Package Marking	Inductance ( $\mu\text{H}$ )	Tolerance	Q Min.	LQ Test Freq. (MHz)	S.R.F. (MHz)	Rdc Max (ohms)	Idc Max. (mA)
47N	None	0.047	10%, 20%	15	50	320	0.20	300
68N	None	0.068	10%, 20%	15	50	280	0.20	300
82N	None	0.082	10%, 20%	15	50	255	0.20	300
R10	None	0.10	10%, 20%	20	25	235	0.30	250
R12	None	0.12	10%, 20%	20	25	220	0.30	250
R15	None	0.15	10%, 20%	20	25	200	0.40	250
R18	None	0.18	10%, 20%	20	25	185	0.40	250
R22	None	0.22	10%, 20%	20	25	170	0.50	250
R27	None	0.27	10%, 20%	20	25	150	0.50	250
R33	None	0.33	10%, 20%	20	25	145	0.55	250
R39	None	0.39	10%, 20%	25	25	135	0.65	200
R47	None	0.47	10%, 20%	25	25	125	0.65	200
R56	None	0.56	10%, 20%	25	25	115	0.75	150
R68	None	0.68	10%, 20%	25	25	105	0.80	150
R82	None	0.82	10%, 20%	25	25	100	1.00	150
1R0	None	1.00	10%, 20%	45	10	75	0.40	50
1R2	None	1.20	10%, 20%	45	10	65	0.50	50
1R5	None	1.50	10%, 20%	45	10	60	0.50	50
1R8	None	1.80	10%, 20%	45	10	55	0.60	50
2R2	None	2.20	10%, 20%	45	10	50	0.65	30
2R7	None	2.70	10%, 20%	45	10	45	0.75	30
3R3	None	3.30	10%, 20%	45	10	41	0.80	30
3R9	None	3.90	10%, 20%	45	10	38	0.90	15
4R7	None	4.70	10%, 20%	45	10	35	1.00	15
5R6	None	5.60	10%, 20%	50	4	32	0.90	15
6R8	None	6.80	10%, 20%	50	4	29	1.00	15
8R2	None	8.20	10%, 20%	50	4	26	1.10	15
100	None	10.00	10%, 20%	50	2	24	1.15	15

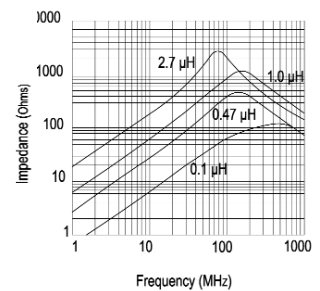
### Characteristics - Q vs Frequency



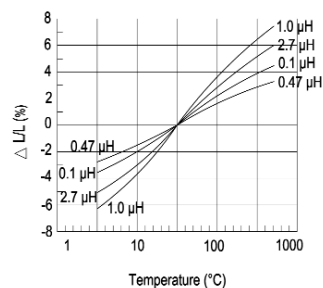
### Inductance vs Current



### Impedance vs Frequency



### Inductance vs Temperature

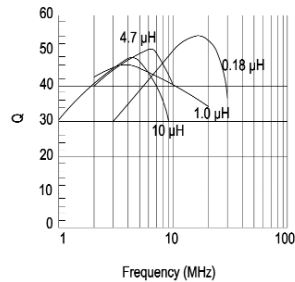


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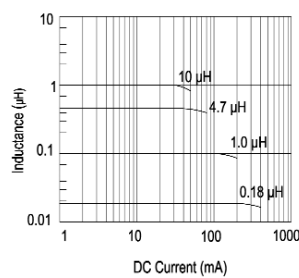
### Characteristics - Electrical - 1206 Package

Inductance Code	Package Marking	Inductance ( $\mu\text{H}$ )	Tolerance	Q Min.	LQ Test Freq. (MHz)	S.R.F. (MHz)	Rdc Max (ohms)	Idc Max. (mA)
47N	None	0.047	10%, 20%	20	50	320	0.15	300
68N	None	0.068	10%, 20%	20	50	280	0.25	300
R10	None	0.10	10%, 20%	20	25	235	0.25	250
R12	None	0.12	10%, 20%	20	25	250	0.30	250
R15	None	0.15	10%, 20%	20	25	200	0.30	250
R18	None	0.18	10%, 20%	20	25	185	0.40	250
R22	None	0.22	10%, 20%	20	25	170	0.50	250
R27	None	0.27	10%, 20%	20	25	150	0.50	250
R33	None	0.33	10%, 20%	20	25	145	0.60	250
R39	None	0.39	10%, 20%	25	25	135	0.50	200
R47	None	0.47	10%, 20%	25	25	125	0.60	200
R56	None	0.56	10%, 20%	25	25	115	0.70	150
R68	None	0.68	10%, 20%	25	25	105	0.80	150
R82	None	0.82	10%, 20%	25	25	100	0.90	150
1R0	None	1.00	10%, 20%	30	10	75	0.40	100
1R2	None	1.20	10%, 20%	30	10	65	0.50	100
1R5	None	1.50	10%, 20%	30	10	60	0.50	50
1R8	None	1.80	10%, 20%	30	10	55	0.50	50
2R2	None	2.20	10%, 20%	30	10	50	0.60	50
2R7	None	2.70	10%, 20%	30	10	45	0.60	50
3R3	None	3.30	10%, 20%	30	10	41	0.70	50
3R9	None	3.90	10%, 20%	30	10	38	0.80	50
4R7	None	4.70	10%, 20%	30	10	35	0.90	50
5R6	None	5.60	10%, 20%	35	4	32	0.70	25
6R8	None	6.80	10%, 20%	35	4	29	0.90	25
8R2	None	8.20	10%, 20%	35	4	26	0.90	25
100	None	10.00	10%, 20%	35	2	24	1.00	25
120	None	12.00	10%, 20%	35	2	22	1.05	15
150	None	15.00	10%, 20%	30	1	19	0.70	5
180	None	18.00	10%, 20%	30	1	18	0.70	5
220	None	22.00	10%, 20%	30	1	16	0.90	5
270	None	27.00	10%, 20%	30	1	14	0.90	5
330	None	33.00	10%, 20%	30	0.4	13	1.05	5

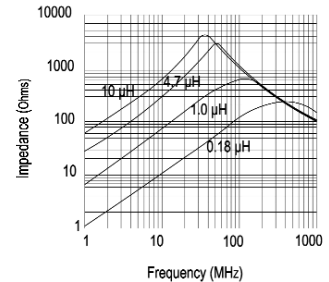
#### Characteristics - Q vs Frequency



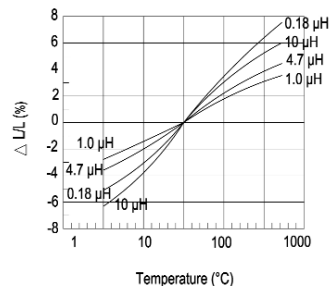
#### Inductance vs Current



#### Impedance vs Frequency

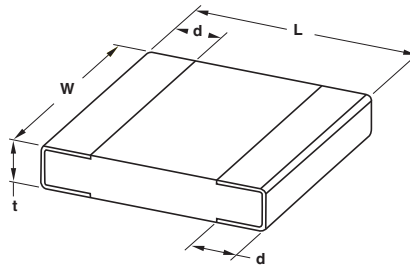


#### Inductance vs Temperature



## Type 3670 Series

### Dimensions



Case Size	L	W	d	t
0603 (1J)	1.6 ±0.15	0.8 ±0.15	0.3 ±0.2	0.8 ±0.15
0805 (2A)	2.0 ±0.2	1.2 ±0.2	0.5 ±0.3	0.9 ±0.2
1206 (2B)	3.2 ±0.2	1.6 ±0.2	0.5 ±0.3	1.1 ±0.2

### Tape and Reel Specification

06:03 Size (1J)	4000 pieces per 7" Reel
08:05 Size (2A)	4000 pieces per 7" Reel
12:06 Size (2B)	3000 pieces per 7" Reel

### How to Order

3670	2A	1R0	K
<b>Common Part</b>	<b>Style</b>	<b>Inductance</b>	<b>Tolerance</b>
3670 - Multilayer Inductor	1J – 0603 Package 2A – 0805 Package 2B – 1206 Package	See Relevant Table for Inductance Code	K - ±10% M - 20%

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