

Type 3670 Series

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The 3670 series from Tyco Electronics 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.

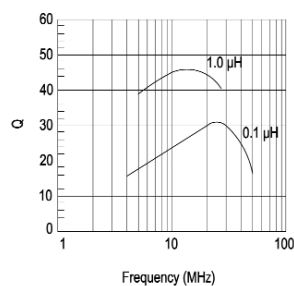
Key Features

- Down to 06:03 Case Size
- Wide Range of Inductance Values
- Low DC Resistance
- Low Q Factor
- 5%, 10% and 20% Tolerances Available
- High Reliability
- Taped and reeled
- Suited To Volume Applications

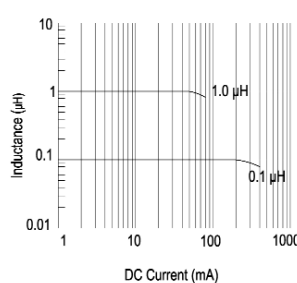
Characteristics -
Electrical - 0603 Package

Inductance Code	Package Marking	Inductance (μH)	Tolerance	Q Min.	LQ Test Freq. (MHz)	S.R.F. (MHz)	Rdc Max (ohms)	Idc Max. (mA)
47N	None	0.047	5%, 10%, 20%	10	50	260	0.30	50
68N	None	0.068	5%, 10%, 20%	10	50	250	0.30	50
82N	None	0.082	5%, 10%, 20%	10	50	245	0.30	50
R10	None	0.10	5%, 10%, 20%	15	25	240	0.50	50
R12	None	0.12	5%, 10%, 20%	15	25	205	0.50	50
R15	None	0.15	5%, 10%, 20%	15	25	180	0.60	50
R18	None	0.18	5%, 10%, 20%	15	25	165	0.60	50
R22	None	0.22	5%, 10%, 20%	15	25	150	0.80	50
R27	None	0.27	5%, 10%, 20%	15	25	136	0.80	50
R33	None	0.33	5%, 10%, 20%	15	25	125	0.85	35
R39	None	0.39	5%, 10%, 20%	15	25	110	1.00	35
R47	None	0.47	5%, 10%, 20%	15	25	105	1.35	35
R56	None	0.56	5%, 10%, 20%	15	25	95	1.55	35
R68	None	0.68	5%, 10%, 20%	15	25	90	1.70	35
R82	None	0.82	5%, 10%, 20%	15	25	85	2.10	35
1R0	None	1.00	5%, 10%, 20%	35	10	75	0.60	25
1R2	None	1.20	5%, 10%, 20%	35	10	65	0.80	25
1R5	None	1.50	5%, 10%, 20%	35	10	60	0.80	25
1R8	None	1.80	5%, 10%, 20%	35	10	55	0.95	25
2R2	None	2.20	5%, 10%, 20%	35	10	50	1.15	15
2R7	None	2.70	5%, 10%, 20%	35	10	45	1.35	15

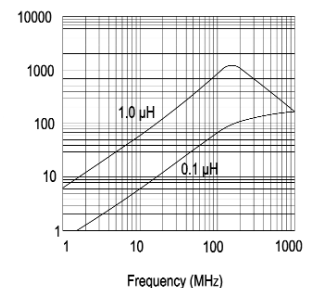
Characteristics -
Q vs Frequency



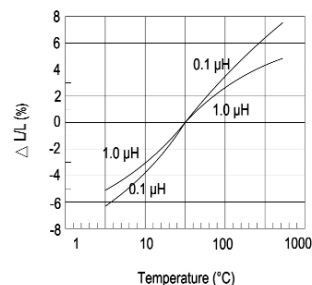
Inductance vs Current



Impedance vs Frequency



Inductance vs Temperature

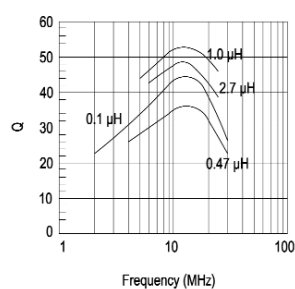


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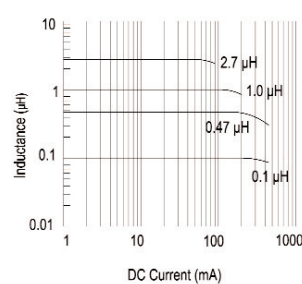
**Characteristics -
Electrical - 0805 Package**

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

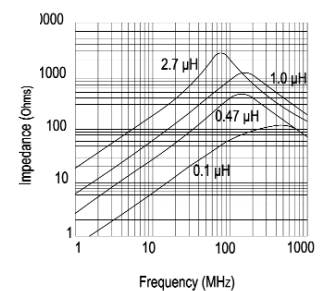
**Characteristics -
Q vs Frequency**



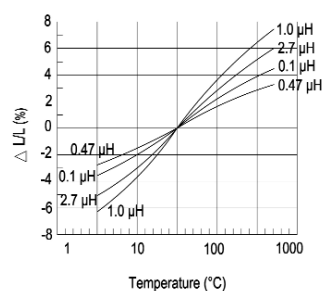
Inductance vs Current



Impedance vs Frequency



Inductance vs Temperature

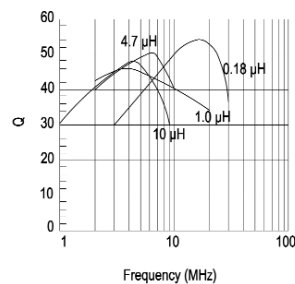


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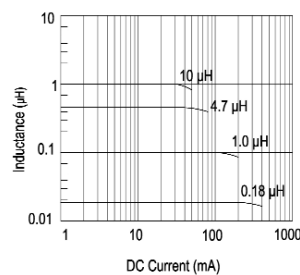
Characteristics -
Electrical - 1206 Package

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

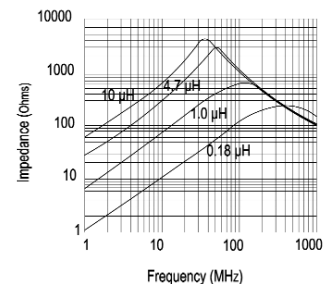
Characteristics -
Q vs Frequency



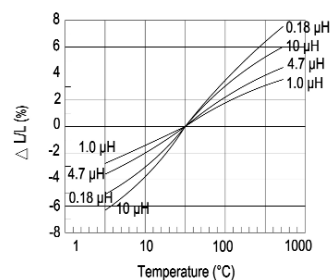
Inductance vs Current



Impedance vs Frequency

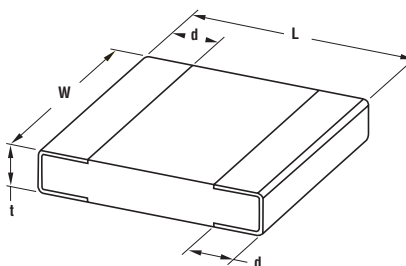


Inductance vs Temperature



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
Common Part	Style	Inductance	Tolerance
3670 - Multilayer Inductor	1J – 0603 Package 2A – 0805 Package 2B – 1206 Package	See Relevant Table for Inductance Code	J - ±5% K - ±10% M - 20%