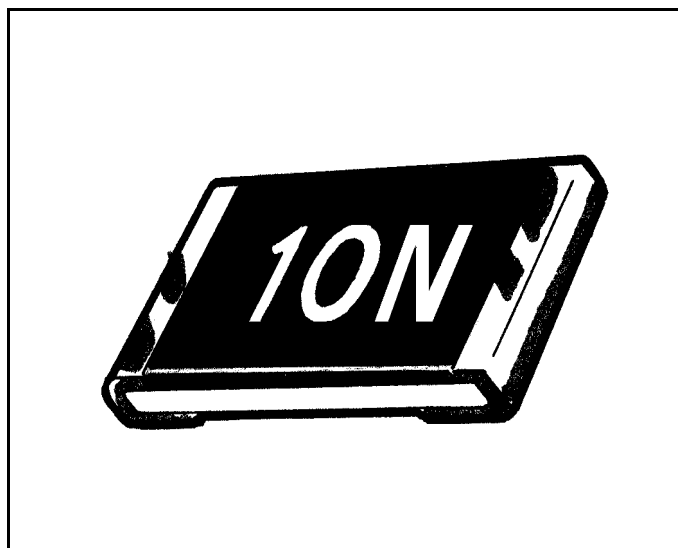


TYPE 3640 SERIES

1st April 2003
ISSUE 2

High Frequency Inductors SMD



TYPE 3640 SERIES

The 3640 series is an innovative thin film chip inductor designed for high frequency application in the communications industry. This inductor combines very small size (to 04:02) with a robustness and durability only previously seen in moulded parts. Available in values down to 1 nanohenry and packaged in 4 standard sizes, this is the perfect solution for your design requirements. Available via our distribution network.

KEY FEATURES

- Down to 04:02 Case Size
- Low Inductor Values
- Low DC Resistance
- High Q Factor
- 2% and 5% Tolerance
- High Self Resonant Frequency
- Suitable for Reflow Solder
- Lab Kits Available

STOCKISTS:

This product is available from Farnell.

TYPE 3640 SERIES

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ELECTRICAL ~ 0402 Package

Inductance Code	Package Marking	Inductance (nH)	Tolerance (±)	Q Min.	LQ Test Freq. (MHz)	S.R.F (MHz)	Rdc Max. (ohms)	Idc Max. (mA)
1N0	None	1.0	0.2nh	10	300	7000	0.10	1200
1N2	None	1.2	0.2nh	10	300	7000	0.10	1200
1N5	None	1.5	0.2nh	10	300	7000	0.15	930
1N8	None	1.8	0.2nh	10	300	7000	0.15	730
2N2	None	2.2	0.2nh	10	300	7000	0.20	600
2N7	None	2.7	0.2nh	10	300	7000	0.20	580
3N3	None	3.3	0.2nh	10	300	7000	0.30	500
3N9	None	3.9	0.2nh	10	300	7000	0.40	420
4N7	None	4.7	0.2nh	10	300	7000	0.60	340
5N6	None	5.6	0.2nh	10	300	7000	0.70	320
6N8	None	6.8	0.2nh	10	300	5500	0.80	290
8N2	None	8.2	0.2nh	10	300	5500	1.30	230
10N	None	10	2%	10	300	5500	1.50	210
12N	None	12	2%	10	300	4000	1.80	190
15N	None	15	2%	10	300	4000	2.55	160
18N	None	18	2%	10	300	4000	2.55	160
22N	None	22	2%	10	300	2000	2.55	160
27N	None	27	2%	10	300	2000	2.70	150
33N	None	33	2%	10	200	1500	3.60	130
39N	None	39	2%	10	200	1500	4.00	120

ELECTRICAL ~ 0603 Package

Inductance Code	Package Marking	Inductance (nH)	Tolerance (±)	Q Min.	LQ Test Freq. (MHz)	S.R.F (MHz)	Rdc Max. (ohms)	Idc Max. (mA)
1N0	None	1.0	0.2nh	20	300	6000	0.10	1000
1N2	None	1.2	0.2nh	20	300	6000	0.10	1000
1N5	None	1.5	0.2nh	20	300	6000	0.10	1000
1N8	None	1.8	0.2nh	20	300	6000	0.15	800
2N2	None	2.2	0.2nh	20	300	6000	0.15	800
2N7	None	2.7	0.2nh	20	300	6000	0.15	800
3N3	None	3.3	0.2nh	20	300	6000	0.20	700
3N9	None	3.9	0.2nh	20	300	6000	0.20	700
4N7	None	4.7	0.2nh	20	300	6000	0.25	600
5N6	None	5.6	0.2nh	15	300	5000	0.50	400
6N8	None	6.8	0.2nh	15	300	5000	0.50	400
8N2	None	8.2	0.2nh	15	300	5000	0.50	400
10N	None	10	2%	15	300	4000	1.00	300
12N	None	12	2%	15	300	4000	1.00	300
15N	None	15	2%	15	300	3000	1.00	300
18N	None	18	2%	15	300	3000	1.50	250
22N	None	22	2%	15	300	2000	1.50	250
27N	None	27	2%	15	300	2000	2.00	200
33N	None	33	2%	15	200	1500	2.00	200
39N	None	39	2%	15	200	1500	3.00	180
47N	None	47	2%	15	200	1500	3.00	180
56N	None	56	2%	15	200	1000	4.00	150
68N	None	68	2%	15	200	1000	4.50	140
82N	None	82	2%	10	200	1000	6.00	120
R10	None	100	2%	10	200	1000	8.50	100

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ELECTRICAL ~ 0805 Package

Inductance Code	Package Marking	Inductance (nH)	Tolerance (±)	Q Min.	LQ Test Freq. (MHz)	S.R.F (MHz)	Rdc Max. (ohms)	Idc Max. (mA)
1N0	None	1.0	0.2nh	24	500	13000	0.03	900
1N2	None	1.2	0.2nh	24	500	13000	0.04	900
1N5	None	1.5	0.2nh	24	500	10000	0.05	900
1N8	None	1.8	0.2nh	28	500	9000	0.06	900
2N2	None	2.2	0.2nh	28	500	8000	0.07	800
2N7	None	2.7	0.2nh	28	500	8000	0.09	800
3N3	None	3.3	0.2nh	28	500	6000	0.10	800
3N9	None	3.9	0.2nh	29	500	6000	0.12	800
4N7	None	4.7	0.2nh	30	500	5000	0.16	700
5N6	None	5.6	2%	30	500	4500	0.18	700
6N8	None	6.8	2%	30	500	4000	0.26	500
8N2	None	8.2	2%	30	500	3000	0.28	500
10N	None	10	2%	32	500	2750	0.36	450
12N	None	12	2%	30	500	2500	0.38	450
15N	None	15	2%	28	500	2250	0.40	400
18N	None	18	2%	22	500	1600	1.00	300
22N	None	22	2%	22	500	1450	1.10	300
27N	None	27	2%	15	200	1350	1.20	300
33N	None	33	2%	17	200	1200	1.30	300
39N	None	39	2%	17	200	1000	1.40	250
47N	None	47	2%	17	200	950	1.50	250
56N	None	56	2%	15	200	800	3.50	150
68N	None	68	2%	15	200	700	3.50	150
82N	None	82	2%	15	200	600	4.00	150

ELECTRICAL ~ 1206 Package

Inductance Code	Package Marking	Inductance (nH)	Tolerance (±)	Q Min.	LQ Test Freq. (MHz)	S.R.F (MHz)	Rdc Max. (ohms)	Idc Max. (mA)
2N2	None	2.2	0.2nh	32	500	9000	0.07	1000
2N7	None	2.7	0.2nh	38	500	7000	0.07	1000
3N3	None	3.3	0.2nh	40	500	6000	0.06	1000
3N9	None	3.9	0.2nh	42	500	5000	0.10	900
4N7	None	4.7	0.2nh	44	500	4500	0.11	900
5N6	None	5.6	2% / 5%	44	500	4000	0.13	900
6N8	None	6.8	2% / 5%	40	500	3500	0.15	800
8N2	None	8.2	2% / 5%	40	500	3000	0.18	800
10N	None	10	2% / 5%	44	500	2900	0.21	800
12N	None	12	2% / 5%	42	500	2700	0.22	800
15N	None	15	2% / 5%	42	500	2400	0.30	500
18N	None	18	2% / 5%	42	500	2100	0.37	500
22N	None	22	2% / 5%	42	500	1940	0.45	500
27N	None	27	2% / 5%	30	200	1680	0.58	500
33N	None	33	2% / 5%	28	200	1500	0.69	400
39N	None	39	2% / 5%	28	200	1300	0.78	400
47N	None	47	2% / 5%	28	200	1270	0.85	400
56N	None	56	2% / 5%	18	200	600	1.50	400
68N	None	68	2% / 5%	17	200	570	1.60	200
82N	None	82	2% / 5%	18	200	480	1.80	200
R10	None	100	2% / 5%	19	200	470	1.90	200

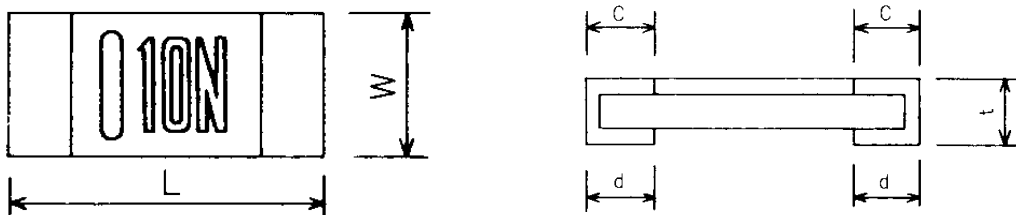
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ADDITIONAL DATA

Operating Temperature: -40°C to +85°C

DIMENSIONS



Case Size	L	W	C	d	t
0402 (1E)	1.0 ±0.1	0.50 ±0.05	0.15 ±0.1	0.15 ±0.1	0.35 ±0.2
0603 (1J)	1.6 ±0.2	0.80 ±0.1	0.30 ±0.1	0.30 ±0.1	0.50 ±0.1
0805 (2A)	2.0 ±0.2	1.25 ±0.2	0.40 ±0.2	0.30 ±0.2	0.50 ±0.1
1206 (2B)	3.2 ±0.2	1.60 ±0.2	0.50 ±0.2	0.40 +0.2/-0.1	0.60 ±0.1

TAPE & REEL SPECIFICATION

04:02 Size (1E) ~ 10000 pieces per 7" Reel
 06:03 Size (1J) ~ 5000 pieces per 7" Reel
 08:05 Size (2A) ~ 4000 pieces per 7" Reel
 12:06 Size (2B) ~ 4000 pieces per 7" Reel
 miniReels available ~ please enquire

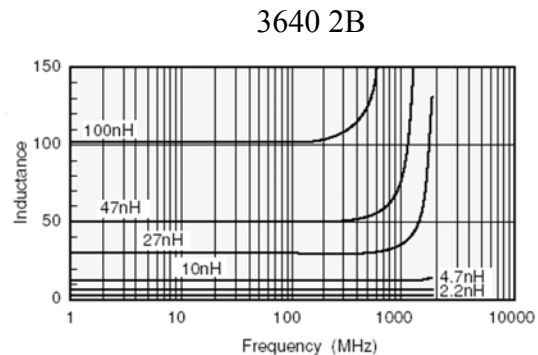
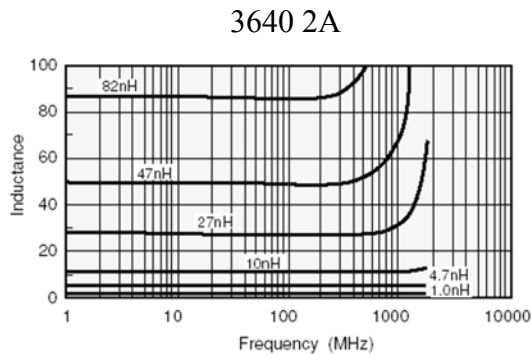
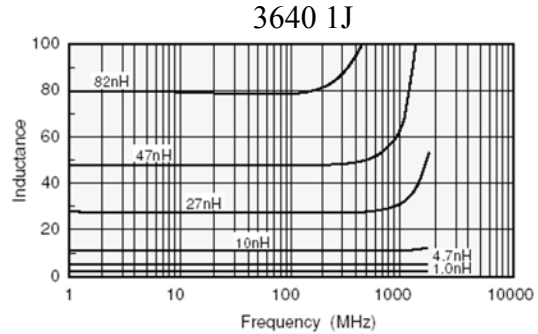
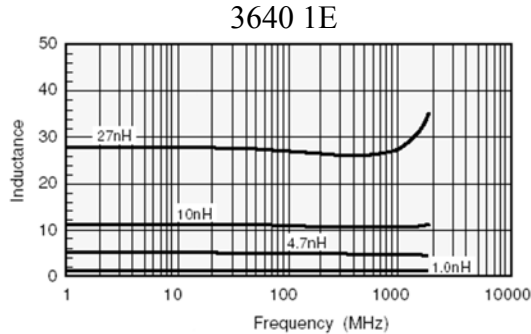
HOW TO ORDER

3640	2A	1N0	K
COMMON PART	CASE SIZE	INDUCTANCE VALUE	TOLERANCE
3640	1E – 0402 Package 1J – 0603 Package 2A – 0805 Package 2B – 1206 Package	See tables above for inductance code	K – 10%

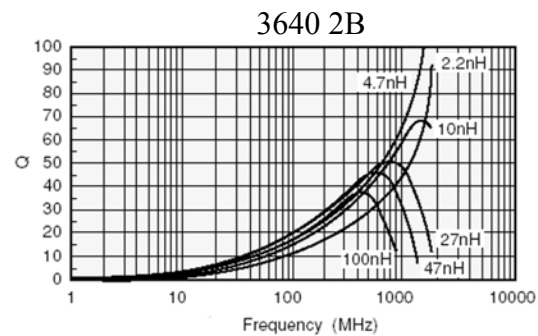
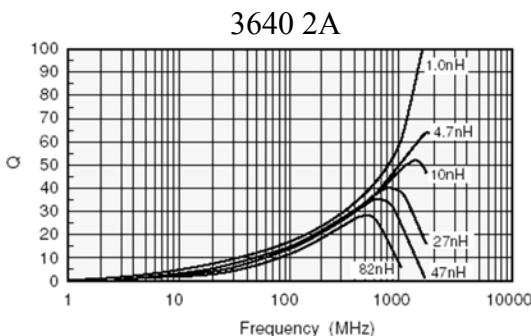
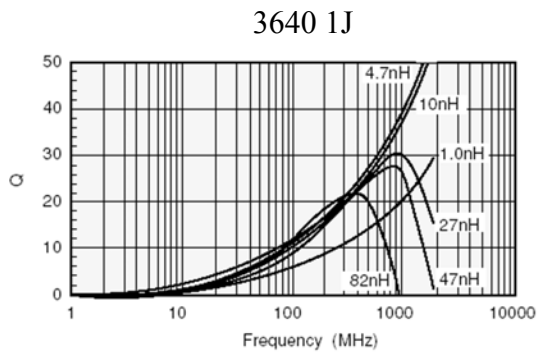
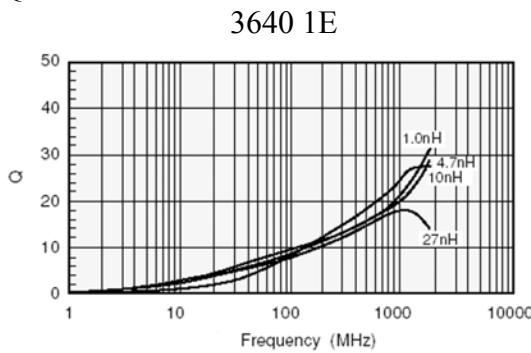
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L FREQUENCY CHARACTERISTICS



Q FREQUENCY CHARACTERISTICS



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