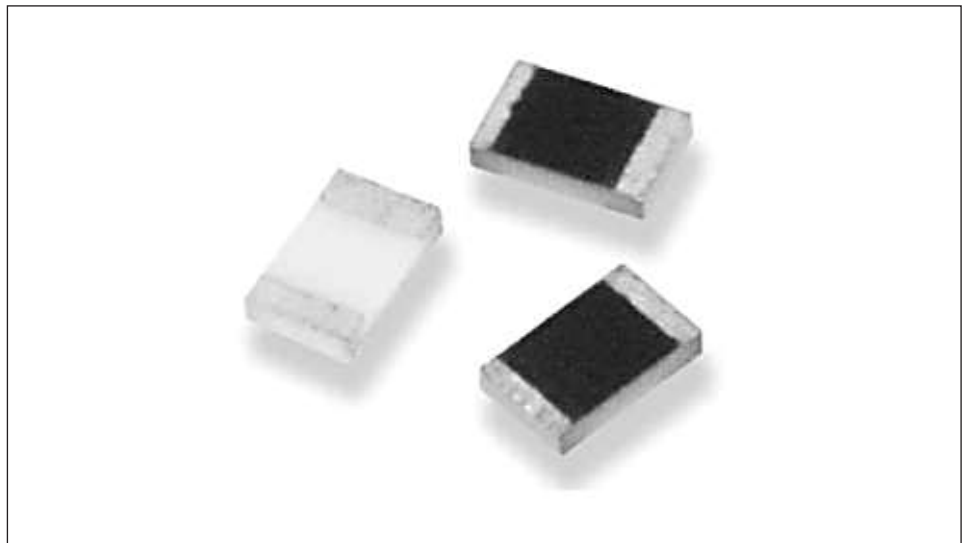


## Type 3640 Series

### Key Features

- Low Inductor Values
- Low DC Resistance
- High Q Factor
- High Self Resonant Frequency
- Suitable for Reflow Solder
- Lab Kits Available



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 02:01) with a robustness and durability only previously seen in moulded parts.

Available in values down to 0.2 nanohenry and packaged in 5 standard sizes, this is the perfect solution for your design requirements. Available via our distribution network.

### Characteristics - Electrical - 0201 Package

Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
0.1	±0.1/0.2/0.3 nH	8	500	0.20	400	9
0.2	±0.1/0.2/0.3 nH	8	500	0.20	400	9
0.3	±0.1/0.2/0.3 nH	8	500	0.20	400	9
0.4	±0.1/0.2/0.3 nH	8	500	0.25	350	9
0.5	±0.1/0.2/0.3 nH	8	500	0.25	350	9
0.6	±0.1/0.2/0.3 nH	8	500	0.25	350	9
0.7	±0.1/0.2/0.3 nH	8	500	0.30	300	9
0.8	±0.1/0.2/0.3 nH	8	500	0.30	300	9
0.9	±0.1/0.2/0.3 nH	8	500	0.30	300	9
1	0.1/0.2/0.3 nH	8	500	0.3	300	9
1.1	0.1/0.2/0.3 nH	8	500	0.35	300	9
1.2	0.1/0.2/0.3 nH	8	500	0.35	300	9
1.3	0.1/0.2/0.3 nH	8	500	0.45	250	9
1.4	0.1/0.2/0.3 nH	8	500	0.45	250	9
1.5	0.1/0.2/0.3 nH	8	500	0.45	250	9
1.6	0.1/0.2/0.3 nH	8	500	0.55	200	9
1.7	0.1/0.2/0.3 nH	8	500	0.55	200	9
1.8	0.1/0.2/0.3 nH	8	500	0.55	200	9
1.9	0.1/0.2/0.3 nH	8	500	0.55	200	9
2	0.1/0.2/0.3 nH	8	500	0.7	200	8
2.1	0.1/0.2/0.3 nH	8	500	0.7	200	8
2.2	0.1/0.2/0.3 nH	8	500	0.7	200	8
2.3	0.1/0.2/0.3 nH	8	500	0.8	150	8
2.4	0.1/0.2/0.3 nH	8	500	0.8	150	8
2.5	0.1/0.2/0.3 nH	8	500	0.8	150	8
2.6	0.1/0.2/0.3 nH	8	500	0.8	150	8
2.7	0.1/0.2/0.3 nH	8	500	0.8	150	8
2.8	0.1/0.2/0.3 nH	8	500	1	150	6
2.9	0.1/0.2/0.3 nH	8	500	1	150	6
3	0.1/0.2/0.3 nH	8	500	1	150	6
3.1	0.1/0.2/0.3 nH	8	500	1	150	6
3.2	0.1/0.2/0.3 nH	8	500	1	150	6
3.3	0.1/0.2/0.3 nH	8	500	1	150	6
3.4	0.1/0.2/0.3 nH	8	500	1.2	150	6

## Type 3640 Series

### Characteristics - Electrical - 0201 Package (continued)

Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
3.5	0.1/0.2/0.3 nH	8	500	1.2	150	6
3.6	0.1/0.2/0.3 nH	8	500	1.2	150	6
3.7	0.1/0.2/0.3 nH	8	500	1.2	150	6
3.9	0.1/0.2/0.3 nH	8	500	1.2	150	6
4.7	0.1/0.2/0.3 nH	8	500	1.4	130	6
5.6	2 / 5 %	8	500	1.8	130	4
6.8	2 / 5 %	8	500	2.3	110	4
8.2	2 / 5 %	8	500	3	110	3
10	2 / 5 %	8	500	3.5	80	2

### Characteristics - Electrical - 0402 Package

Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
0.2	0.1/0.2/0.3nH	13	500	0.1	800	14
0.4	0.1/0.2/0.3nH	13	500	0.1	800	14
0.8	0.1/0.2/0.3nH	13	500	0.15	700	14
1	0.1/0.2/0.3nH	13	500	0.15	700	12
1.1	0.1/0.2/0.3nH	13	500	0.15	700	12
1.2	0.1/0.2/0.3nH	13	500	0.15	700	12
1.3	0.1/0.2/0.3nH	13	500	0.25	700	10
1.4	0.1/0.2/0.3nH	13	500	0.25	700	10
1.5	0.1/0.2/0.3nH	13	500	0.25	700	10
1.6	0.1/0.2/0.3nH	13	500	0.25	560	10
1.7	0.1/0.2/0.3nH	13	500	0.25	560	10
1.8	0.1/0.2/0.3nH	13	500	0.25	560	10
1.9	0.1/0.2/0.3nH	13	500	0.35	560	8
2	0.1/0.2/0.3nH	13	500	0.35	560	8
2.1	0.1/0.2/0.3nH	13	500	0.35	440	8
2.2	0.1/0.2/0.3nH	13	500	0.35	440	8
2.3	0.1/0.2/0.3nH	13	500	0.35	440	8
2.4	0.1/0.2/0.3nH	13	500	0.35	440	8
2.5	0.1/0.2/0.3nH	13	500	0.35	440	8
2.6	0.1/0.2/0.3nH	13	500	0.35	440	8
2.7	0.1/0.2/0.3nH	13	500	0.35	440	8
2.8	0.1/0.2/0.3nH	13	500	0.45	380	6
2.9	0.1/0.2/0.3nH	13	500	0.45	380	6
3	0.1/0.2/0.3nH	13	500	0.45	380	6
3.1	0.1/0.2/0.3nH	13	500	0.45	380	6
3.2	0.1/0.2/0.3nH	13	500	0.45	380	6
3.3	0.1/0.2/0.3nH	13	500	0.45	380	6
3.4	0.1/0.2/0.3nH	13	500	0.55	380	6
3.5	0.1/0.2/0.3nH	13	500	0.55	380	6
3.6	0.1/0.2/0.3nH	13	500	0.55	380	6
3.7	0.1/0.2/0.3nH	13	500	0.55	340	6
3.8	0.1/0.2/0.3nH	13	500	0.55	340	6
3.9	0.1/0.2/0.3nH	13	500	0.55	340	6
4.7	0.1/0.2/0.3nH	13	500	0.65	320	6
5.6	0.1/0.2/0.3nH	13	500	0.85	280	6
5.9	0.1/0.2/0.3nH	13	500	0.85	280	6
6.8	0.1/0.2/0.3nH	13	500	1.05	260	6
7.2	0.1/0.2/0.3nH	13	500	1.05	260	6
8	0.1/0.2/0.3nH	13	500	1.25	220	5.5
8.2	0.1/0.2/0.3nH	13	500	1.25	220	5.5
9.1	0.1/0.2/0.3nH	13	500	1.25	220	5.5
10	1/2/3/5%	13	500	1.35	200	4.5
12	1/2/3/5%	13	500	1.55	180	3.7
13.8	1/2/3/5%	13	500	1.75	180	3.7
15	1/2/3/5%	13	500	1.75	130	3.3
17	1/2/3/5%	13	500	1.95	100	3.1
18	1/2/3/5%	13	500	2.15	100	3.1
20.8	1/2/3/5%	13	500	2.55	90	2.8
22	1/2/3/5%	13	500	2.65	90	2.8
27	1/2/3/5%	13	500	3.25	75	2.5
33	5%	13	500	4.5	75	2.5

## Type 3640 Series

### Characteristics - Electrical 0603 Package

Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor Min @ 500MHz	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
1	0.1/0.2/0.3nH	15	300	0.35	800	13
1.2	0.1/0.2/0.3nH	15	300	0.35	800	13
1.5	0.1/0.2/0.3nH	15	300	0.35	800	10
1.8	0.1/0.2/0.3nH	15	300	0.35	300	10
2.2	0.1/0.2/0.3nH	15	300	0.35	300	8
2.7	0.1/0.2/0.3nH	15	300	0.45	300	6
3.3	0.1/0.2/0.3nH	15	300	0.45	300	6
3.9	0.1/0.2/0.3nH	15	300	0.45	300	6
4.7	0.1/0.2/0.3nH	15	300	0.55	300	5
5.6	0.1/0.2/0.3nH	15	300	0.65	300	5
6.8	0.1/0.2/0.3nH	15	300	0.75	300	5
8.2	0.1/0.2/0.3nH	15	300	0.95	300	4
10	1/2/3/5%	15	300	0.95	300	4
12	1/2/3/5%	15	300	1.05	300	3
15	1/2/3/5%	15	300	1.35	300	3
18	1/2/3/5%	15	300	1.65	300	2
22	1/2/3/5%	15	300	1.95	250	2
27	1/2/3/5%	15	300	2.35	250	2
33	1/2/3/5%	15	300	2.75	250	1.5
39	1/2/3/5%	15	300	3	200	1.5
47	1/2/3/5%	15	300	3	200	1.5
56	1/2/3/5%	15	300	5	150	1
68	1/2/3/5%	15	300	5	150	1
100	2/3/5%	15	300	7.5	100	1

### Characteristics - Electrical 0805 Package

Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
1	±0.2 nH	20	500	0.25	900	13
1.2	±0.2 nH	20	500	0.25	900	13
1.5	±0.2 nH	20	500	0.25	900	10
1.8	±0.2 nH	25	500	0.25	900	9
2.2	±0.2 nH	25	500	0.25	800	8
2.7	±0.2 nH	25	500	0.25	800	8
3.3	±0.2 nH	25	500	0.25	800	6
3.9	±0.2 nH	25	500	0.25	800	6
4.7	±0.2 nH	25	500	0.50	700	5
5.6	±2% / ±5%	25	500	0.50	700	4.5
6.8	±2% / ±5%	25	500	0.50	500	4
8.2	±2% / ±5%	25	500	0.50	500	3
10	±2% / ±5%	25	500	1.00	400	2.5
12	±2% / ±5%	25	500	1.00	400	2.5
15	±2% / ±5%	25	500	1.00	300	2
18	±2% / ±5%	20	500	1.00	300	1.5
22	±2% / ±5%	20	500	1.50	250	1
27	±2% / ±5%	15	200	1.50	250	1
33	±2% / ±5%	15	200	1.50	200	1
39	±2% / ±5%	15	200	1.50	200	0.8
47	±2% / ±5%	15	200	1.50	200	0.8
56	±2% / ±5%	10	200	4.00	150	0.7
68	±2% / ±5%	10	200	5.00	150	0.7
82	±2% / ±5%	10	200	5.00	150	0.6

## Type 3640 Series

### Characteristics - Electrical 1206 Package

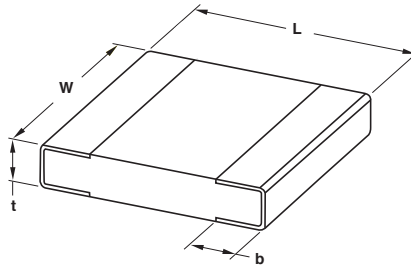
Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
2.2	±0.2 nH	25	500	0.25	1000	9
2.7	±0.2 nH	25	500	0.25	1000	7
3.3	±0.2 nH	25	500	0.25	1000	6
3.9	±0.2 nH	35	500	0.25	900	5
4.7	±0.2 nH	35	500	0.5	900	4.5
5.6	±2% / ±5%	35	500	0.5	900	4
6.8	±2% / ±5%	35	500	0.5	800	3.5
8.2	±2% / ±5%	35	500	0.5	800	3
10	±2% / ±5%	40	500	0.5	800	2.5
12	±2% / ±5%	40	500	0.5	800	2.5
15	±2% / ±5%	40	500	1	500	2
18	±2% / ±5%	40	500	1	500	2
22	±2% / ±5%	40	500	1	500	1.5
27	±2% / ±5%	25	200	1	500	1.5
33	±2% / ±5%	25	200	2	400	1
39	±2% / ±5%	25	200	2	400	1
47	±2% / ±5%	25	200	2	400	1
56	±2% / ±5%	15	200	2	400	0.5
68	±2% / ±5%	15	200	2	200	0.5
82	±2% / ±5%	15	200	2	200	0.4
100	±2% / ±5%	15	200	2	200	0.4

### Environmental Characteristics -

Item	Specification	Test Method
<b>Dielectric Withstand Voltage:</b>	>100V	100VAC(rms) for 1minute.
<b>Insulation Resistance:</b>	>1000MΩ	100VDC for 1minute
<b>Resistance to Soldering Heat:</b>	ΔL ≤10%	270±5°C, 10±1 second
<b>High Temperature Exposure:</b>	ΔL ≤10%	+85±2°C, 1000 +48/-0 hours
<b>Moisture Resistance:</b>	ΔL ≤10%	40±2°C, 90~95%RH, 1000 +48/-0 hours
<b>Low Temperature Storage:</b>	ΔL ≤10%	-40±3°C, 1000 +48/-0 hours
<b>Temperature Cycle:</b>	ΔL ≤10%	-40°C/RT/85°C/RT, 10 cycles
<b>Solderability:</b>	95%min coverage	MIL-STE-202F Method 208GH, 260°C ±5°C, 2±0.5 (sec)
<b>Storage Temperature:</b>		25 ±3°C;
<b>Humidity:</b>		<75%RH

## Type 3640 Series

### Dimensions



Series	L	W	t	b
0201	0.6±0.05	0.3±0.05	0.23±0.05	0.15±0.05
0402	1.0±0.05	0.5±0.05	0.32±0.05	0.2±0.1
0603	1.6±0.1	0.8±0.1	0.45±0.1	0.3±0.2
0805	2.0±0.2	1.25±0.2	0.5±0.1	0.3±0.2
1206	3.2±0.2	1.6±0.2	0.6±0.1	0.4±0.2

### How to Order

3640	2A	1N0	G	TD
<b>Common Part</b>	<b>Case Size</b>	<b>Inductance Value</b>	<b>Tolerance</b>	<b>Packaging</b>
3640	1H – 0201 Package 1E – 0402 Package 1J – 0603 Package 2A – 0805 Package 3A – 1206 Package	See relevant table for Inductance Code	F - ±1% G - ±2% H - ±3% J - ±5% B - ±0.1nH A - ±0.2nH S - ±0.3nH	TD - 5000 pcs/reel TDF - 1000pcs/reel

TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks.  
Other logos, product and Company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this datasheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this datasheet are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А