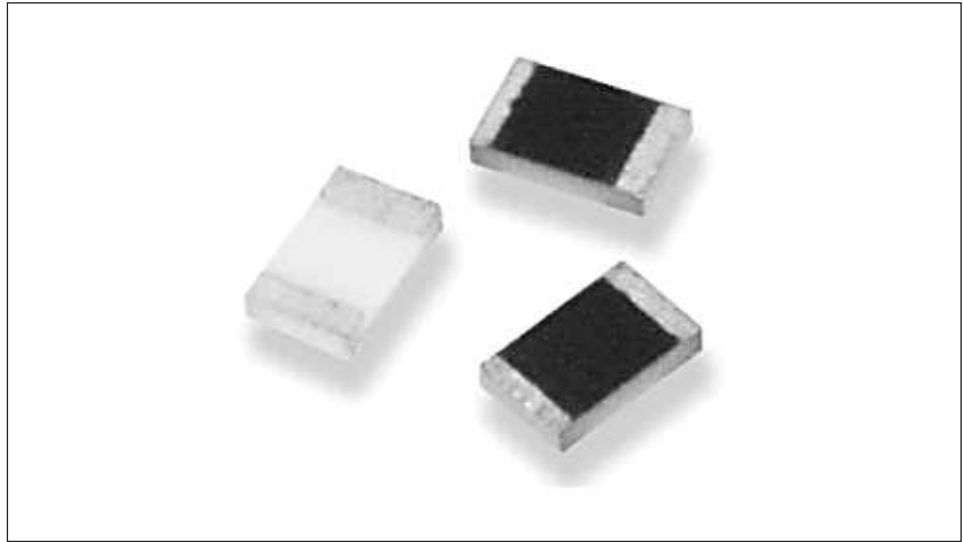


## Type 3640 Series

### 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

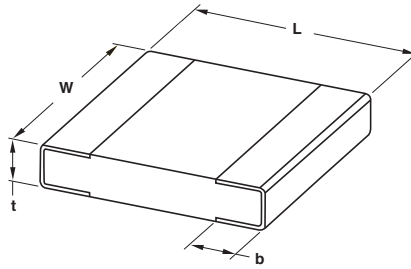
Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
2.2	±0.2 nH	25	500	0.25	1000	9
2.7	±0.2 nH	25	500	0.25	1000	7
3.3	±0.2 nH	25	500	0.25	1000	6
3.9	±0.2 nH	35	500	0.25	900	5
4.7	±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.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9