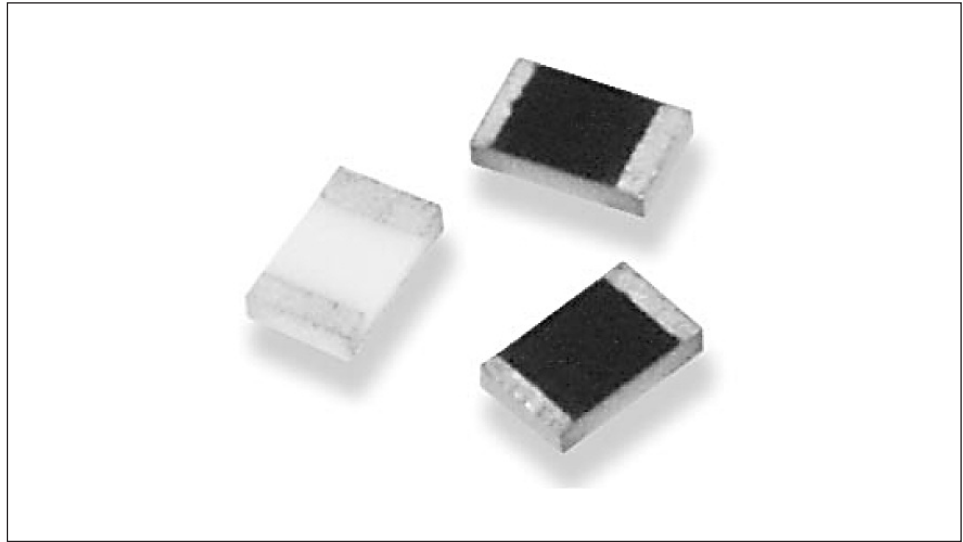


Type 3640 Series

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 2 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

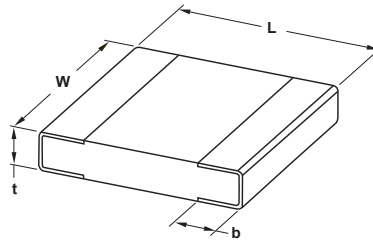
Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor (Min)	Measuring Frequency (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
0.2	0.1/0.2/0.3nH	13	500	0.1	800	14
0.4	0.1/0.2/0.3nH	13	500	0.1	800	14
0.8	0.1/0.2/0.3nH	13	500	0.15	700	14
1	0.1/0.2/0.3nH	13	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

Environmental Characteristics -

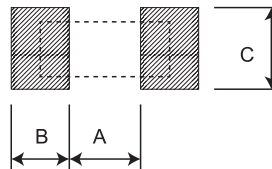
Item	Specification	Test Method
Dielectric Withstand Voltage:	>100V	100VAC(rms) for 1minute.
Insulation Resistance:	>1000MΩ	100VDC for 1minute
Resistance to Soldering Heat:	$\Delta L \leq 10\%$	260±5°C, 10 second
High Temperature Exposure:	$\Delta L \leq 10\%$	+85±2°C, 1000 +48/-0 hours
Moisture Resistance:	$\Delta L \leq 10\%$	40±2°C, 90~95%RH, 1000 +48/-0 hours
Low Temperature Storage:	$\Delta L \leq 10\%$	-40±3°C, 1000 +48/-0 hours
Temperature Cycle:	$\Delta L \leq 10\%$	-40°C/RT/85°C/RT, 10 cycles
Solderability:	95%min coverage	245±5°C for 3 seconds
Storage Temperature:		25 ±3°C;
Humidity:		<80%RH
Reference Standards:		MIL-STD-202F, JIS-C 5201-1

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

Recommend Land Pattern



Type	A	B	C
0201	0.30	0.25	0.30 ±0.2
0401	0.50	0.45	0.60 ±0.2

How to Order

3640	2A	1N0	G	TD
Common Part	Case Size	Inductance Value	Tolerance	Packaging
3640	1H – 0201 Package 1E – 0402 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[2176075-6](#)