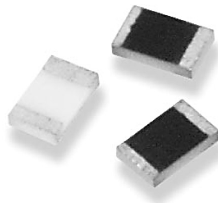


Type 3640 Series



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 0.2 nanohenry and packaged in 2 standard sizes, this is the perfect solution for your design requirements.

Available via our distribution network.

Key Features

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

Characteristics - Electrical 0603 Package

Inductance Nominal (nH)	Inductance Tolerance (% or nH)	Q (Min)	LQ Test Freq. (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
1.0	0.1/0.2nH	15	300	0.2	800	6
1.2	0.1/0.2nH	15	300	0.2	800	6
1.5	0.1/0.2nH	15	300	0.2	800	6
1.8	0.1/0.2nH	15	300	0.2	300	6
2.2	0.1/0.2nH	15	300	0.2	300	6
2.7	0.1/0.2nH	15	300	0.2	300	6
3.3	0.1/0.2nH	15	300	0.2	300	6
3.9	0.1/0.2nH	15	300	0.2	300	6
4.7	0.1/0.2nH	15	300	0.2	300	5
5.6	0.1/0.2nH	15	300	0.5	300	5
6.8	0.1/0.2nH	15	300	0.5	300	5
8.2	0.1/0.2nH	15	300	0.5	300	4
10	1/2/5%	15	300	1.0	300	4
12	1/2/5%	15	300	1.0	300	3
15	1/2/5%	15	300	1.0	300	3
18	1/2/5%	15	300	2.0	300	2
22	1/2/5%	15	300	2.0	250	2
27	1/2/5%	15	300	2.0	250	2
33	1/2/5%	15	300	2.0	250	1.5
39	1/2/5%	15	300	3.0	200	1.5
47	1/2/5%	15	300	3.0	200	1.5
56	1/2/5%	15	300	5.0	150	1
68	1/2/5%	15	300	5.0	150	1
100	2/5%	15	300	7.5	100	1

Test Equipment: HP4286A+Agilent 16196A

Characteristics - Electrical 0402 Package

Inductance Nominal (nH)	Inductance Tolerance (% or nH)	Q (Min)	LQ Test Freq. (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
0.2	0.1/0.2nH	13	500	0.1	800	6
0.4	0.1/0.2nH	13	500	0.1	800	6
0.8	0.1/0.2nH	13	500	0.1	700	6
1.0	0.1/0.2nH	13	500	0.1	700	6
1.2	0.1/0.2nH	13	500	0.1	700	6
1.5	0.1/0.2nH	13	500	0.2	700	6
1.6	0.1/0.2nH	13	500	0.2	560	6
1.8	0.1/0.2nH	13	500	0.2	560	6
2.0	0.1/0.2nH	13	500	0.3	560	6
2.2	0.1/0.2nH	13	500	0.3	440	6
2.7	0.1/0.2nH	13	500	0.3	440	6
3.1	0.1/0.2nH	13	500	0.4	380	6
3.3	0.1/0.2nH	13	500	0.4	380	6
3.6	0.1/0.2nH	13	500	0.4	380	6
3.9	0.1/0.2nH	13	500	0.5	340	6
4.7	0.1/0.2nH	13	500	0.6	320	6
5.6	0.1/0.2nH	13	500	0.7	280	6
5.9	0.1/0.2nH	13	500	0.7	280	6
6.8	0.1/0.2nH	13	500	0.9	260	6
7.2	0.1/0.2nH	13	500	0.9	260	6
8.0	0.1/0.2nH	13	500	1.1	220	5.5
8.2	0.1/0.2nH	13	500	1.1	220	5.5

Test Equipment: HP4286A+Agilent 16196A

Type 3640 Series

Characteristics - Electrical
0402 Package (continued)

Inductance Nominal (nH)	Inductance Tolerance (% or nH)	Q (Min)	LQ Test Freq. (MHz)	Resistance DC/Max. (Ohm)	Current DC/Max. (mA)	Self Resonant Frequency/Min. (GHz)
9.1	0.1/0.2nH	13	500	1.1	220	5.5
10	1/2/5%	13	500	1.3	200	4.5
12	1/2/5%	13	500	1.6	180	3.7
13.8	1/2/5%	13	500	1.6	180	3.7
15	1/2/5%	13	500	1.8	130	3.3
17	1/2/5%	13	500	2.0	100	3.1
18	1/2/5%	13	500	2.0	100	3.1
20.8	1/2/5%	13	500	2.6	90	2.8
22	1/2/5%	13	500	2.6	90	2.8

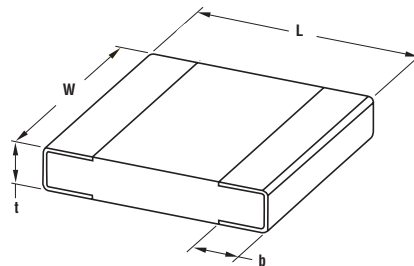
Test Equipment: HP4286A+Agilent 16196A

Environmental Characteristics -

Item	Specification	Test Method
Bending Test	As SPEC.	Bending Amplitude 3mm for 10 seconds
Dielectric Withstand Voltage	>100V	100VAC(rms) for 1minute.
Insulation Resistance	>1000M Ω	100VDC for 1minute.
Resistance to Soldering Heat	$\Delta L \leq 10\%$	270 $\pm 5^\circ\text{C}$, 10 ± 1 second
High Temperature Exposure	$\Delta L \leq 10\%$	+85 $\pm 2^\circ\text{C}$, 1000 +48/-0 hours
Moisture Resistance	$\Delta L \leq 10\%$	40 $\pm 2^\circ\text{C}$, 90~95%RH, 1000 +48/-0 hours
Low Temperature Storage	$\Delta L \leq 10\%$	-40 $\pm 3^\circ\text{C}$, 1000 +48/-0 hours
Temperature Cycle	$\Delta L \leq 10\%$	-40 $^\circ\text{C}$ /RT/85 $^\circ\text{C}$ /RT, 10 cycles
Solderability	95%min coverage	MIL-STE-202F Method 208GH 260 $^\circ\text{C} \pm 5^\circ\text{C}$, 2 ± 0.5 (sec)

* Storage Temperature :25 $\pm 3^\circ\text{C}$; >80%RH

Dimensions



Series	L	W	t	b
0603	1.6 ± 0.1	0.8 ± 0.1	0.45 ± 0.1	0.3 ± 0.2
0402	1.0 ± 0.05	0.5 ± 0.05	0.32 ± 0.05	0.2 ± 0.1

How to Order

3640	2A	1N0	K	TD
Common Part	Case Size	Inductance Value	Tolerance	Packaging
3640	1E – 0402 Package 1J – 0603 Package	See relevant table for Inductance Code	F - 1% G - 2% J - 5%	TD - 5000 pcs/reel TDF - 1000pcs/reel