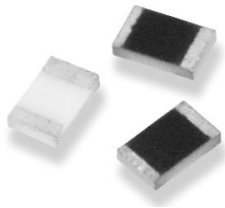


Type 3640 Series

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

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

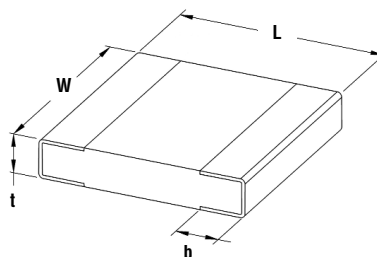
Test Equipment: HP4286A+Agilent 16196A

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	ΔL ≤10%	270±5°C, 10±1 second
High Temperature Exposure	ΔL ≤10%	+85±2°C, 1000 +48/-0 hours
Moisture Resistance	ΔL ≤10%	40±2°C, 90~95%RH, 1000 +48/-0 hours
Low Temperature Storage	ΔL ≤10%	-40±3°C, 1000 +48/-0 hours
Temperature Cycle	ΔL ≤10%	-40°C/RT/85°C/RT, 10 cycles
Solderability	95%min coverage	MIL-STE-202F Method 208GH 260°C ±5°C, 2±0.5 (sec)

* Storage Temperature :25 ±3°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