Thin-Film RF/Microwave Inductor Technology

Accu-L® Series

L0402 Tight Tolerance RF Inductor

GENERAL DESCRIPTION
ITF TECHNOLOGY

The L0402 LGA Inductor is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

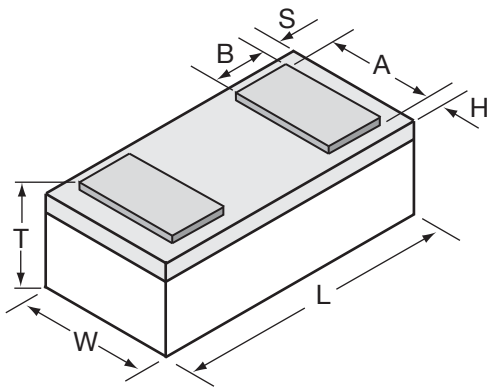
APPLICATIONS

- Mobile Communications
- Satellite TV Receivers
- GPS
- Vehicle Location Systems
- Wireless LAN's
- Filters
- Matching Networks

LAND GRID ARRAY ADVANTAGES

- Inherent Low Profile
- Self Alignment during Reflow
- Excellent Solderability
- Low Parasitics
- Better Heat Dissipation

DIMENSIONS: millimeters (inches)
(BOTTOM VIEW)



L	1.00±0.10 (0.039±0.004)
W	0.58±0.07 (0.023±0.003)
T	0.35±0.10 (0.014±0.004)

A	0.48±0.05 (0.019±0.002)
B	0.17±0.05 (0.007±0.002)
S, H	0.064±0.05 (0.003±0.002)

HOW TO ORDER

L0402	XXX	X	H	N	TR
	Inductance (nH)	Tolerance	Series	LGA Termination Sn100	Taped & Reeled

P/N Example: **L04023R3BHNTR**

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

QUALITY INSPECTION

Finished parts are 100% tested for electrical parameters and visual characteristics. Each production lot is evaluated on a sample basis for:

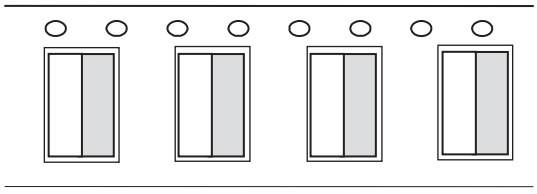
- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance: 125°C, IR, 4 hours

TERMINATION

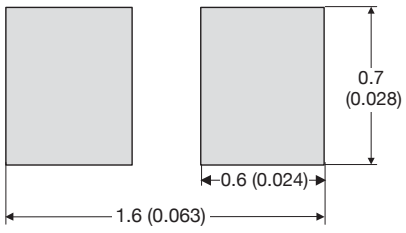
Nickel/Lead Free solder coating compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

MAKING AND ORIENTATION IN TAPE

(Top View)



Recommended Pad Layout Dimensions mm (inches)



ELECTRICAL SPECIFICATIONS

450MHz				900MHz	1900MHz	2400MHz	SRF min. (MHz)	R_{DC} max. (Ω)	I_{DC} max. (mA)
L(nH)	Tolerance A=±0.05nH , B=±0.1nH, C=±0.2nH, D=±0.5nH	Q (min)	Q (Typ)	Q (Typ)	Q (Typ)	Q (Typ)			
0.56	± 0.05nH, ± 0.1nH	35	45	55	65	75	20000	0.02	1000
0.68	± 0.05nH, ± 0.1nH	30	40	50	60	70	20000	0.04	750
0.82	± 0.05nH, ± 0.1nH	25	40	50	60	70	20000	0.06	500
1.0	± 0.05nH, ± 0.1nH	20	30	35	40	50	20000	0.15	500
1.2	± 0.05nH, ± 0.1nH, ± 0.2nH	20	30	30	40	45	20000	0.20	400
1.5	± 0.05nH, ± 0.1nH, ± 0.2nH	20	25	30	40	40	18000	0.20	400
1.8	± 0.05nH, ± 0.1nH, ± 0.2nH	18	20	30	35	40	16000	0.20	400
2.2	± 0.05nH, ± 0.1nH, ± 0.2nH	15	20	25	35	40	15000	0.20	400
2.7	± 0.05nH, ± 0.1nH, ± 0.2nH	15	20	25	35	40	9500	0.25	250
3.3	± 0.1nH, ± 0.2nH, ± 0.5nH	15	20	25	35	40	8500	0.40	250
3.9	± 0.1nH, ± 0.2nH, ± 0.5nH	13	20	20	30	30	8000	0.45	250
4.7	± 0.1nH, ± 0.2nH, ± 0.5nH	13	20	20	30	30	7500	0.45	250
5.6	± 0.1nH, ± 0.2nH, ± 0.5nH	13	20	20	30	30	7000	0.65	200
6.8	± 0.1nH, ± 0.2nH, ± 0.5nH	12	15	20	25	30	6500	0.90	200

Please contact factory for intermediate inductance values within the indicated range.