

Surface Mount, Multi Layer High Frequency Ceramic Inductor


FEATURES

- High reliability
- Surface mountable
- Reflow or wave solderable
- Tape and reel packaging per EIA specifications:
4000 pieces on 7" reel
- 100 % lead (Pb)-free and RoHS compliant


**RoHS
COMPLIANT**
MECHANICAL SPECIFICATIONS

Solderability: 90 % coverage after 5 second dip in 235 °C solder following 60 seconds preheat at 120 °C and type R flux dip

Resistance to Solder Heat: 10 seconds in 260 °C solder, after preheat and flux above

Terminal Strength: 0.3 kg (0.66 pounds) for 30 seconds

Beam Strength: 0.3 kg (0.66 pounds)

Flex: 0.0788" [2.0 mm] minimum mounted on 0.063" [1.6 mm] thick PC board

ENVIRONMENTAL SPECIFICATIONS

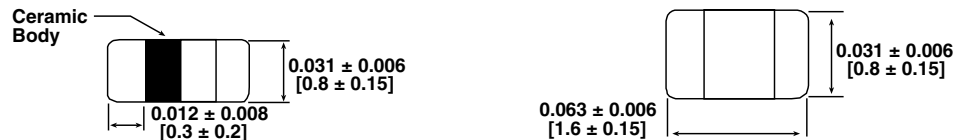
Operating Temperature: - 55 °C to + 125 °C

Thermal Shock: 100 cycles, - 40 °C to + 85 °C

Humidity: + 40 °C, 85 % RH, 1000 hours at full rated current

Load Life: 85 °C for 1000 hours full rated current

STANDARD ELECTRICAL SPECIFICATIONS													
INDUCTANCE (nH)	TOL.	Q (MIN.)	TEST FREQUENCY L + Q (MHz)	Q (TYPICAL)						SRF (MHz)		DCR MAX. (OHMS)	RATED CURRENT (mA)
				100 MHz	300 MHz	500 MHz	800 MHz	1000 MHz	1800 MHz	MIN	TYP		
1.0	± 0.3 nH	8	100	14	30	40	70	90	50	10 000	13 000	0.05	300
1.2	± 0.3 nH	8	100	14	30	40	70	90	50	10 000	13 000	0.05	300
1.5	± 0.3 nH	8	100	14	26	34	47	50	50	6000	13 000	0.10	300
1.8	± 0.3 nH	8	100	10	18	24	30	34	50	6000	13 000	0.10	300
2.2	± 0.3 nH	8	100	12	22	29	37	40	50	6000	12 000	0.10	300
2.7	± 0.3 nH	10	100	13	24	32	41	45	55	6000	11 000	0.10	300
3.3	± 0.3 nH	10	100	14	25	33	42	47	55	6000	9000	0.12	300
3.9	± 0.3 nH	10	100	13	25	33	42	46	55	6000	8000	0.14	300
4.7	± 0.3 nH	10	100	13	25	33	42	47	55	4000	6500	0.16	300
5.6	± 0.3 nH	10	100	14	25	33	42	46	55	4000	5800	0.18	300
6.8	± 10 %, ± 5 %	10	100	14	25	33	43	47	50	4000	5600	0.22	300
8.2	± 10 %, ± 5 %	10	100	14	26	34	44	48	40	3500	5200	0.24	300
10	± 10 %, ± 5 %	12	100	14	26	34	43	47	40	3400	4600	0.26	300
12	± 10 %, ± 5 %	12	100	14	27	35	45	49	35	2600	4000	0.28	300
15	± 10 %, ± 5 %	12	100	15	28	37	46	51	20	2300	3400	0.32	300
18	± 10 %, ± 5 %	12	100	15	27	36	44	48	15	2000	3000	0.35	300
22	± 10 %, ± 5 %	12	100	16	28	36	44	47	-	1600	2900	0.40	300
27	± 10 %, ± 5 %	12	100	16	29	37	45	46	-	1400	2200	0.45	300
33	± 10 %, ± 5 %	12	100	17	31	40	46	47	-	1200	1800	0.55	300
39	± 10 %, ± 5 %	12	100	18	31	39	44	44	-	1100	1600	0.60	300
47	± 10 %, ± 5 %	12	100	17	28	34	35	34	-	900	1600	0.70	300
56	± 10 %, ± 5 %	12	100	17	28	34	34	31	-	900	1400	0.75	300
68	± 10 %, ± 5 %	12	100	18	29	34	30	22	-	700	1200	0.85	300
82	± 10 %, ± 5 %	12	100	18	28	33	27	-	-	600	1100	0.95	300
100	± 10 %, ± 5 %	12	100	18	27	28	16	-	-	600	1000	1.00	300
120	± 10 %, ± 5 %	8	50	16	24	23	-	-	-	500	800	1.20	300
150	± 10 %, ± 5 %	8	50	13	19	16	-	-	-	500	800	1.20	300
180	± 10 %, ± 5 %	8	50	13	18	12	-	-	-	400	700	1.30	300
220	± 10 %, ± 5 %	8	50	12	16	-	-	-	-	400	600	1.50	300

DIMENSIONS in inches [millimeters]

DESCRIPTION

 ILC-0603
MODEL

 10 nH
INDUCTANCE
VALUE

 ± 10 %
INDUCTANCE
TOLERANCE

 ER
PACKAGE
CODE

 e3
JEDEC LEAD (Pb)-FREE
STANDARD

GLOBAL PART NUMBER

I	L	C
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 PRODUCT FAMILY

0	6	0	3
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 SIZE

E	R
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 PACKAGE
CODE

1	0	N
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 INDUCTANCE
VALUE

K

 TOL.



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