Surface Mount, Multi Layer High Frequency Ceramic Inductors

FEATURES

- High reliability
- Surface mountable
- Reflow or wave solderable
- Tape and reel packaging per EIA specifications: 4000 pieces on 7" reel
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

Pb-free
RoHS COMPLIANT
HALOGEN FREE

MECHANICAL SPECIFICATIONS

Solderability: 90 % coverage after 5 s dip in 235 °C solder following 60 s preheat at 120 °C and type R flux dip
Resistance to Solder Heat: 10 s in 260 °C solder, after preheat and flux above
Terminal Strength: 0.2 kg (0.44 lbs) for 30 s
Beam Strength: 0.2 kg (0.44 lbs)
Flex: 0.0788" [2.0 mm] min. mounted on 0.063" [1.6 mm] thick PC board

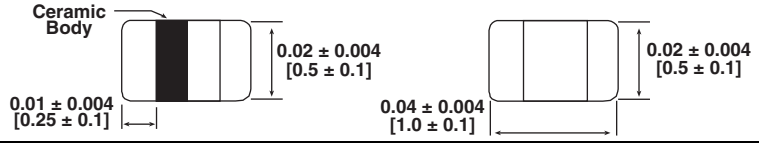
ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: - 55 °C to 125 °C
Thermal Shock: 100 cycles, - 40 °C to + 85 °C
Humidity: + 40 °C, 85 % RH, 1000 h at full rated current
Load Life: 85 °C for 1000 h at full rated current

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	IND. (nH)	TOL.	TEST FREQUENCY (MHz)	Q MIN.	Q TYPICAL			SRF (MHz)		DCR MAX. (Ω)	RATED DC CURRENT MAX. (mA)
					100 MHz	500 MHz	1000 MHz	MIN.	TYP.		
ILC0402ER1N0S	1.0	0.3 nH	100	8	10	21	30	10 000	18 000	0.12	300
ILC0402ER1N2S	1.2	0.3 nH	100	8	10	23	31	10 000	17 000	0.12	300
ILC0402ER1N5S	1.5	0.3 nH	100	8	10	25	35	6000	11 000	0.13	300
ILC0402ER1N8S	1.8	0.3 nH	100	8	10	25	35	6000	11 000	0.14	300
ILC0402ER2N2S	2.2	0.3 nH	100	8	10	23	32	6000	8700	0.16	300
ILC0402ER2N7S	2.7	0.3 nH	100	8	10	21	30	6000	7800	0.17	300
ILC0402ER3N3S	3.3	0.3 nH	100	8	10	22	31	6000	6400	0.19	300
ILC0402ER3N9S	3.9	0.3 nH	100	8	10	19	26	4000	5800	0.22	300
ILC0402ER4N7S	4.7	0.3 nH	100	8	10	19	26	4000	5100	0.24	300
ILC0402ER5N6S	5.6	0.3 nH	100	8	10	20	26	4000	4700	0.27	300
ILC0402ER6N8J	6.8	5 %	100	8	10	19	26	3900	4200	0.32	250
ILC0402ER8N2J	8.2	5 %	100	8	10	22	29	3600	3800	0.37	250
ILC0402ER10NJ	10	5 %	100	8	10	18	23	3200	3400	0.42	250
ILC0402ER12NJ	12	5 %	100	8	10	18	23	2700	2900	0.50	250
ILC0402ER15NJ	15	5 %	100	8	10	19	24	2300	2500	0.55	250
ILC0402ER18NJ	18	5 %	100	8	10	20	25	2100	2400	0.65	200
ILC0402ER22NJ	22	5 %	100	8	10	22	26	1900	2200	0.80	200
ILC0402ER27NJ	27	5 %	100	8	10	22	25	1600	2000	0.90	200
ILC0402ER33NJ	33	5 %	100	8	10	19	20	1300	1800	1.00	200
ILC0402ER39NJ	39	5 %	100	8	10	21	20	1200	1600	1.20	150
ILC0402ER47NJ	47	5 %	100	8	10	18	15	1000	1500	1.30	150
ILC0402ER56NJ	56	5 %	100	8	11	21	14	750	1200	1.40	150
ILC0402ER68NJ	68	5 %	100	8	11	18	12	750	1250	1.40	150
ILC0402ER82NJ	82	5 %	100	8	11	19	8	600	1100	2.00	100
ILC0402ERR10J	100	5 %	100	8	11	17	2	600	1000	2.00	100

DIMENSIONS in inches [millimeters]



DESCRIPTION

ILC-0402	10 nH	± 10 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	L	C	0	4	0	2	E	R	1	0	N	K
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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