Surface-Mount, Multi Layer High Frequency Ceramic Inductors



FEATURES

- High reliability
- Surface mountable
- Tape and reel packaging per EIA specifications: 10 000 pieces on 7" reel
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE

MECHANICAL SPECIFICATIONS

Solderability: 95 % coverage after 3 s ± 1 s dip in 240 °C ± 5 °C solder following 60 s preheat at 100 °C to 150 °C and type R flux dip

Resistance to Solder Heat: 10 s ± 1 s in 260 °C ± 5 °C solder, after preheat and flux above

Terminal Strength: 10 kg for 10 s

Flex: 3 mm min. mounted on 0.8 mm thick PC board

ENVIRONMENTAL SPECIFICATIONS

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

Thermal Shock: 1000 cycles, -55 °C to +125 °C

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

Load Life: +125 °C for 1000 h at full rated current

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	IND. (nH)	TOL.	TEST FREQUENCY (MHz)	Q MIN.	SRF (MHz) MIN.	DCR MAX. (Ω)	RATED DC CURRENT MAX. (mA)
ILC0402ER1N0S	1.0	0.3 nH	100	8	8000	0.10	300
ILC0402ER1N2S	1.2	0.3 nH	100	8	8000	0.10	300
ILC0402ER1N5S	1.5	0.3 nH	100	8	8000	0.10	300
ILC0402ER1N8S	1.8	0.3 nH	100	8	6000	0.10	300
ILC0402ER2N2S	2.2	0.3 nH	100	8	6000	0.15	300
ILC0402ER2N7S	2.7	0.3 nH	100	8	6000	0.17	300
ILC0402ER3N3S	3.3	0.3 nH	100	8	6000	0.19	300
ILC0402ER3N9S	3.9	0.3 nH	100	8	6000	0.19	300
ILC0402ER4N7S	4.7	0.3 nH	100	8	6000	0.23	300
ILC0402ER5N6S	5.6	0.3 nH	100	8	5300	0.26	300
ILC0402ER6N8J	6.8	5 %	100	8	4200	0.29	300
ILC0402ER8N2J	8.2	5 %	100	8	3600	0.33	300
ILC0402ER10NJ	10	5 %	100	8	3200	0.35	300
ILC0402ER12NJ	12	5 %	100	8	2800	0.41	300
ILC0402ER15NJ	15	5 %	100	8	2300	0.46	300
ILC0402ER18NJ	18	5 %	100	8	2100	0.51	300
ILC0402ER22NJ	22	5 %	100	8	1400	0.58	300
ILC0402ER27NJ	27	5 %	100	8	1600	0.67	300
ILC0402ER33NJ	33	5 %	100	8	1500	0.67	200
ILC0402ER39NJ	39	5 %	100	8	1200	1.06	200
ILC0402ER47NJ	47	5 %	100	8	1000	1.15	200
ILC0402ER56NJ	56	5 %	100	8	800	1.20	200
ILC0402ER68NJ	68	5 %	100	8	800	1.25	180
ILC0402ER82NJ	82	5 %	100	8	600	1.40	150
ILC0402ERR10J	100	5 %	100	8	600	1.60	150
ILC0402ERR12J	120	5 %	100	8	600	1.60	150
ILC0402ERR15J	150	5 %	100	8	500	2.99	140
ILC0402ERR18J	180	5 %	100	8	500	3.38	150
ILC0402ERR22J	220	5 %	100	8	500	3.77	120
ILC0402ERR27J	270	5 %	100	8	400	4.90	110

For technical questions, contact: magnetics@vishay.com

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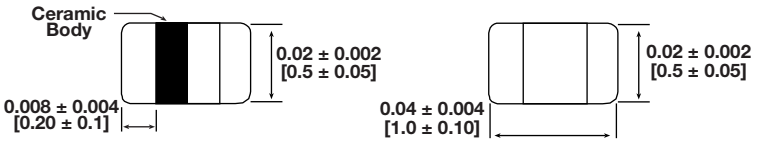
DIMENSIONS in inches [millimeters]



DESCRIPTION

ILC-0402	10 nH	± 5 %	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	J
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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