Surface Mount, Multilayer 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: 0.6 kg (1.32 lbs) for 30 s
Termination: 100 % tin
Beam Strength: 1.0 kg (2.20 lbs)
Flex: 0.0788" [2.0 mm] min. mounted on 0.063" [1.6 mm] thick PC board

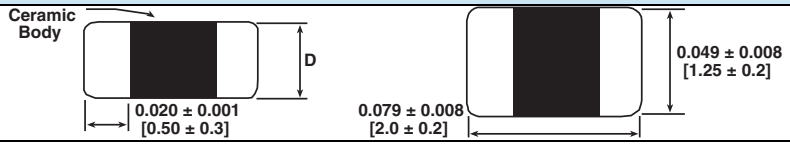
ENVIRONMENTAL SPECIFICATIONS

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.	THICKNESS "D" (INCHES [mm])	TEST FREQ. (MHz)	Q MIN.	Q TYPICAL			SRF (MHz)		DCR MAX. (Ω)	RATED DC CURRENT MAX. (mA)
						100 MHz	500 MHz	1000 MHz	MIN.	TYP.		
ILC0805ER1N5S	1.5	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	10	16	43	67	4000	7000	0.10	300
ILC0805ER1N8S	1.8	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	10	16	56	59	4000	7000	0.10	300
ILC0805ER2N2S	2.2	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	10	16	40	58	4000	7000	0.10	300
ILC0805ER2N7S	2.7	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	12	16	43	60	4000	6500	0.10	300
ILC0805ER3N3S	3.3	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	12	19	52	70	4000	5500	0.13	300
ILC0805ER3N9S	3.9	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	12	19	52	75	3000	4400	0.15	300
ILC0805ER4N7S	4.7	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	12	19	53	70	3000	3500	0.20	300
ILC0805ER5N6S	5.6	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2]	100	15	19	53	70	3000	3500	0.23	300
ILC0805ER6N8J	6.8	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	15	19	44	60	2500	3300	0.25	300
ILC0805ER8N2J	8.2	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	15	19	45	60	2000	2600	0.28	300
ILC0805ER10NJ	10	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	15	20	53	60	3000	2300	0.30	300
ILC0805ER12NJ	12	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	15	20	36	45	1500	2000	0.35	300
ILC0805ER15NJ	15	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	15	20	46	45	1500	1800	0.40	300
ILC0805ER18NJ	18	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	15	20	52	45	1300	1700	0.45	300
ILC0805ER22NJ	22	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	20	40	31	1200	1400	0.50	300
ILC0805ER27NJ	27	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	20	44	29	1000	1300	0.55	300
ILC0805ER33NJ	33	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	20	36	15	1000	1200	0.60	300
ILC0805ER39NJ	39	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	20	36	12	800	1100	0.65	300
ILC0805ER47NJ	47	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	21	33	12	800	1000	0.70	300
ILC0805ER56NJ	56	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	21	31	9	700	900	0.75	300
ILC0805ER68NJ	68	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	21	30	-	600	800	0.80	300
ILC0805ER82NJ	82	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	22	26	-	500	700	0.90	300
ILC0805ERR10J	100	5 %	0.035 ± 0.008 [0.90 ± 0.2]	100	18	22	22	-	500	700	0.90	300
ILC0805ERR12J	120	5 %	0.035 ± 0.008 [0.90 ± 0.2]	50	13	22	17	-	400	600	0.95	300
ILC0805ERR15J	150	5 %	0.035 ± 0.008 [0.90 ± 0.2]	50	13	22	9	-	300	600	1.00	300
ILC0805ERR18J	180	5 %	0.035 ± 0.008 [0.90 ± 0.2]	50	13	21	8	-	300	500	1.10	300
ILC0805ERR22J	220	5 %	0.035 ± 0.008 [0.90 ± 0.2]	50	12	20	4	-	300	500	1.20	300
ILC0805ERR27J	270	5 %	0.035 ± 0.008 [0.90 ± 0.2]	50	12	24	17	-	200	400	1.30	300

DIMENSIONS in inches [millimeters]



DESCRIPTION

ILC-0805	10 nH	± 10 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	L	C	0	8	0	5	E	R	1	0	N	L
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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