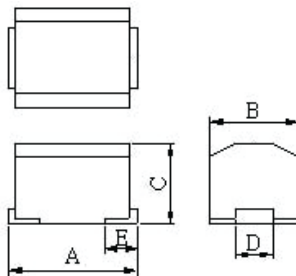


LCM 1210R Molded Chip Inductors



FEATURES

- ◇ Small molded chip inductor.
- ◇ Special ferrite core ensures stable inductance against temperature humidity.
- ◇ Broad inductance range.
- ◇ High Q.
- ◇ Highly reliable.
- ◇ Excellent for flow, re-flow soldering, and soldering iron.

CHARACTERISTICS

INDUCTANCE RANGE .01 μ H TO 330 μ H

TOLERANCE 10% over entire range. 5% Available upon request.

CURRENT RATING based on current flow and temperature rise of 20°C.

TESTING PROCEDURE inductance, Q and SRF measured by HP4191A impedance analyzer with 16092A test clip at specified frequency. DCR measured with digital milliohms meter.

DIELECTRIC STRENGTH 1000 volts DC between both terminals and package of coil for 5 seconds.

SOLDERABILITY 95% of the terminal is covered with solder.

SOLDERING HEAT: RESISTANCE 260°C for 10 seconds after 120°C preheat cycle for 5 minutes.

TEMPERATURE CHARACTERISTIC -25°C to 85°C where inductance and Q shall not change more than 20%.

STORAGE TEMPERATURE store at normal temperature (-5°C to +35°C) and normal humidity (85% rh max) in original package. Do not expose to direct sunlight or harmful gas. This inductor can maintain its characteristics in a storage temperature from -40°C to 125°C for a period of 90 days.

APPLICATIONS

- ◇ TV's, VCR's, and audio equipment
- ◇ Disk drives and other computer peripherals
- ◇ Personal computers
- ◇ Electronic control boards for automobiles
- ◇ Telecommunication devices

DIMENSIONS IN MM

TYPE	A	B	C	D	E
LCM1210R	3.2 $\pm$ 0.2	2.5 $\pm$ 0.2	2.2 $\pm$ 0.2	1.2 $\pm$ 0.4	0.6 $\pm$ 0.1

HUMIDITY CHARACTERISTICS there is no change in performance at a humidity condition of 90-95% rh in 500 hours. Measurement shall be made after 1-hour stabilization at room temperature.

HEAT RESISTANCE subjected to 100°C for 1000 hours without change in appearance, deformation, or performance. Measurement shall be made after 1-hour stabilization at room temperature.

THERMAL SHOCK subjected to 100 cycles at the following temperature range without a change in performance: -25°C for 1 hour + 100°C for 1 hour. Measurement shall be made after 1-hour stabilization at room temperature.

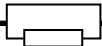
TERMINAL STRENGTH meets 3lbs. Pull test.

RESISTANCE TO SOLVENT no change in appearance when dipped into alcohol or freon for 3 minutes.

MARKING part is marked with inductance value in EIA code.

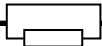
PACKAGING tape and reel only.

LCM 1210R Molded Chip Inductors



Part Number	Inductance (μH)	Tolerance (±%)	Q Min.	Test Frequency (MHz)	SRF (MHz) min	DC Resistance (Ω) Max	IDC (mA) Max
LCM1210R-R010K	0.010	10	15	100	2500	0.13	450
LCM1210R-R012K	0.012	10	17	100	2300	0.14	450
LCM1210R-R015K	0.015	10	19	100	2100	0.16	450
LCM1210R-R018K	0.018	10	21	100	1900	0.18	450
LCM1210R-R022K	0.022	10	23	100	1700	0.20	450
LCM1210R-R027K	0.027	10	23	100	1500	0.22	450
LCM1210R-R033K	0.033	10	25	100	1400	0.24	450
LCM1210R-R039K	0.039	10	25	100	1300	0.27	450
LCM1210R-R047K	0.047	10	26	100	1200	0.30	450
LCM1210R-R056K	0.056	10	26	100	1100	0.33	450
LCM1210R-R068K	0.068	10	27	100	1000	0.36	450
LCM1210R-R082K	0.082	10	27	100	900	0.40	450
LCM1210R-R10K	0.10	10	28	100	700	0.44	450
LCM1210R-R12K	0.12	10	30	25.20	500	0.22	450
LCM1210R-R15K	0.15	10	30	25.20	450	0.25	450
LCM1210R-R18K	0.18	10	30	25.20	400	0.28	450
LCM1210R-R22K	0.22	10	30	25.20	350	0.32	450
LCM1210R-R27K	0.27	10	30	25.20	320	0.36	450
LCM1210R-R33K	0.33	10	30	25.20	300	0.40	450
LCM1210R-R39K	0.39	10	30	25.20	250	0.45	450
LCM1210R-R47K	0.47	10	30	25.20	220	0.50	450
LCM1210R-R56K	0.56	10	30	25.20	180	0.55	450
LCM1210R-R68K	0.68	10	30	25.20	160	0.60	450
LCM1210R-R82K	0.82	10	30	25.20	140	0.65	450
LCM1210R-1R0K	1.00	10	30	7.960	90	0.70	400
LCM1210R-1R2K	1.20	10	30	7.960	85	0.75	390
LCM1210R-1R5K	1.50	10	30	7.960	70	0.85	370
LCM1210R-1R8K	1.80	10	30	7.960	60	0.90	350
LCM1210R-2R2K	2.20	10	30	7.960	50	1.00	320
LCM1210R-2R7K	2.70	10	30	7.960	45	1.10	290
LCM1210R-3R3K	3.30	10	30	7.960	40	1.20	260
LCM1210R-3R9K	3.90	10	30	7.960	37	1.30	250
LCM1210R-4R7K	4.70	10	30	7.960	32	1.50	220

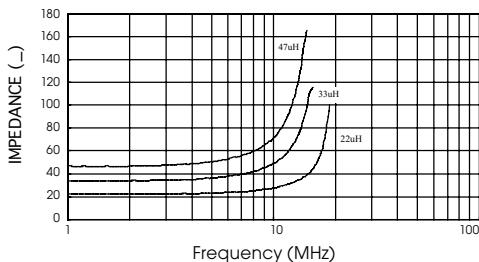
LCM1210R Molded Chip Inductors



Part Number	Inductance (μ H)	Tolerance ($\pm$ %)	Q Min.	Test Frequency (MHz)	SRF (MHz) min	DC Resistance (Ω) Max	IDC (mA) Max
LCM1210R-5R6K	5.60	10	30	7.960	30	1.60	200
LCM1210R-6R8K	6.80	10	30	7.960	28	1.80	180
LCM1210R-8R2K	8.20	10	30	7.960	25	2.00	170
LCM1210R-100K	10	10	30	2.520	23	2.10	150
LCM1210R-120K	12	10	30	2.520	20	2.50	140
LCM1210R-150K	15	10	30	2.520	19	2.80	130
LCM1210R-180K	18	10	30	2.520	17	3.30	120
LCM1210R-220K	22	10	25	2.520	16	3.70	110
LCM1210R-270K	27	10	30	2.520	14	5.00	80
LCM1210R-330K	33	10	30	2.520	13	5.60	70
LCM1210R-390K	39	10	30	2.520	12	6.40	65
LCM1210R-470K	47	10	30	2.520	10	7.00	60
LCM1210R-560K	56	10	30	2.520	9	8.00	55
LCM1210R-680K	68	10	30	2.520	9	9.00	50
LCM1210R-820K	82	10	30	2.520	8	10.0	45
LCM1210R-101K	100	10	20	0.796	7	10.0	40
LCM1210R-121K	120	10	20	0.796	7	11.0	70
LCM1210R-151K	150	10	20	0.796	6	15.0	65
LCM1210R-181K	180	10	20	0.796	6	17.0	60
LCM1210R-221K	220	10	20	0.796	5	21.0	50
LCM1210R-271K	270	10	20	0.796	6	22.0	45
LCM1210R-331K	330	10	20	0.796	5	34.0	40

TEST INSTRUMENTS: HP4291A IMPEDANCE / MATERIAL ANALYZER

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

