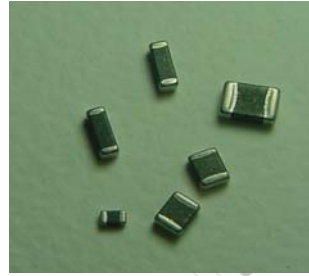


# Multilayer Chip Inductors

## Features

- Monolithic structure for high reliability.
- No cross coupling between inductors due to magnetic shield.
- Ideal for high density installation.
- Dimension are unified for automatic mounting
- Excellent solderability and high heat resistance for either flow or reflow soldering
- Closed magnetic circuit avoids crosstalk and is suitable for Density printed circuit boards.



## Applications

- Personal or notebook computers and peripheral equipment ( CD-ROM, Hard Disk, Modem, Printer).
- Other various electronic appliances.

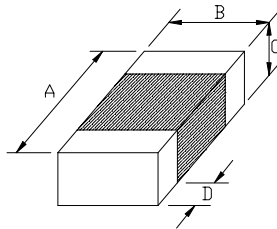
## Part Number Systems

**MI - 322513 - 47N - K - LF**

(1) (2) (3) (4) (5)

(1)	Product series	(2)	Size
(3)	Inductance Value: 47N = 0.047uH	(4)	Inductance Tolerance: J = ± 5%, K = ± 10%, M = ± 20%,
(5)	ROHs Compliant		

## Shape And Dimensions



Unit: mm

Type	A	B	C	D
322513	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.3	0.6 ~ 1.0

## Multilayer Chip Inductors

MI-322513 (1210)-Series				ELECTRICAL CHARACTERISTICS			
Part Number	Inductance ( $\mu$ H)	Tolerance	Q Min	L/Q Test Freq.(MHz)	SRF (MHz) Min	Rdc ( $\Omega$ ) Max	Idc (mA) Max
MI-322513-R10M-LF	0.10	K, M	20	25	235	0.25	250
MI-322513-R12M-LF	0.12	K, M	20	25	220	0.30	250
MI-322513-R15M-LF	0.15	K, M	20	25	200	0.30	250
MI-322513-R18M-LF	0.18	K, M	20	25	185	0.40	250
MI-322513-R22M-LF	0.22	K, M	20	25	170	0.40	250
MI-322513-R27M-LF	0.27	K, M	20	25	150	0.50	250
MI-322513-R33M-LF	0.33	K, M	20	25	145	0.60	250
MI-322513-R39M-LF	0.39	K, M	25	25	135	0.50	200
MI-322513-R47M-LF	0.47	K, M	25	25	125	0.60	200
MI-322513-R56M-LF	0.56	K, M	25	25	115	0.70	150
MI-322513-R68M-LF	0.68	K, M	25	25	105	0.80	150
MI-322513-R82M-LF	0.82	K, M	25	25	100	0.90	150
MI-322513-1R0M-LF	1.0	K, M	45	10	75	0.40	100
MI-322513-1R2M-LF	1.2	K, M	45	10	65	0.50	100
MI-322513-1R5M-LF	1.5	K, M	45	10	60	0.50	50
MI-322513-1R8M-LF	1.8	K, M	45	10	55	0.50	50
MI-322513-2R2M-LF	2.2	K, M	45	10	50	0.60	50
MI-322513-2R7M-LF	2.7	K, M	45	10	45	0.60	50
MI-322513-3R3M-LF	3.3	K, M	45	10	41	0.70	50
MI-322513-3R9M-LF	3.9	K, M	45	10	38	0.80	50
MI-322513-4R7M-LF	4.7	K, M	45	10	35	0.90	50
MI-322513-5R6M-LF	5.6	K, M	50	4	32	0.70	25
MI-322513-6R8M-LF	6.8	K, M	50	4	29	0.80	25
MI-322513-8R2M-LF	8.2	K, M	50	4	26	0.90	25
MI-322513-100M-LF	10	K, M	50	2	24	1.00	25
MI-322513-120M-LF	12	K, M	50	2	22	1.05	15
MI-322513-150M-LF	15	K, M	35	1	19	0.70	5
MI-322513-180M-LF	18	K, M	35	1	18	0.70	5
MI-322513-220M-LF	22	K, M	35	1	16	0.90	5
MI-322513-270M-LF	27	K, M	35	1	14	0.90	5
MI-322513-330M-LF	33	K, M	35	0.4	13	1.05	5
MI-322513-390M-LF	39	K, M	40	2	11	3.00	10
MI-322513-470M-LF	47	K, M	40	2	10	3.40	10

# Multilayer Chip Inductors

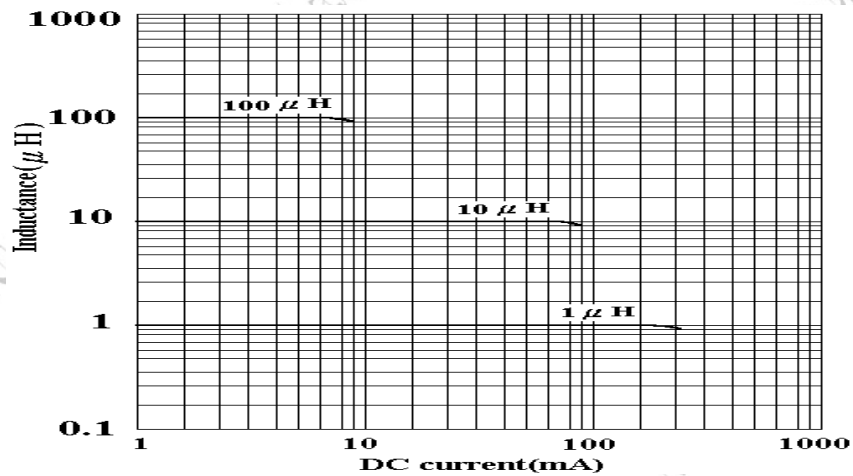
MI-322513 (1210)-Series				ELECTRICAL CHARACTERISTICS			
Part Number	Inductance (uH)	Tolerance	Q Min	L Test Freq.(MHz)	SRF (MHz) Min	Rdc (Ω) Max	Idc (mA) Max
MI-322513-560M-LF	56	K, M	40	2	9.5	3.80	4
MI-322513-680M-LF	68	K, M	40	1	9.5	3.00	4
MI-322513-820M-LF	82	K, M	40	1	9.0	3.40	4
MI-322513-101M-LF	100	K, M	40	1	8	3.80	4
MI-322513-121M-LF	120	K, M	30	0.4	6	3.00	2

\* All specifications are subjected to change without prior notice.

## Typical Electrical Characteristics

### ❖ MI-322513 (1210)-Series

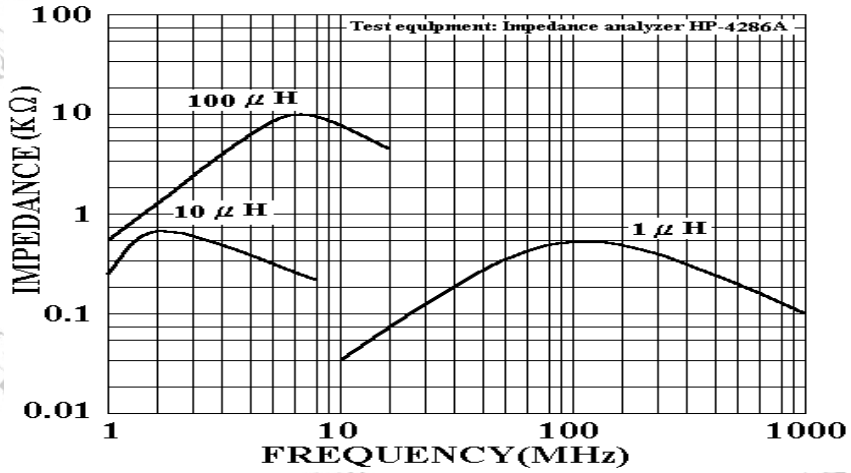
Inductance Vs. DC Superposition



# Multilayer Chip Inductors

## Typical Electrical Characteristics

Impedance Vs. Frequency Characteristics



Q Vs. Frequency Characteristics

