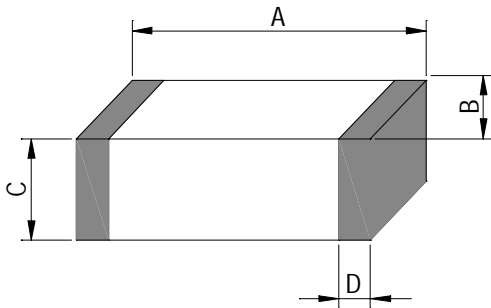




# Multilayer Chip Inductor MH1005/MH1608/MH2012 Series

## ■ CONFIGURATION & DIMENSIONS : (m/m)



Series	A	B	C	D
MH1005	1.00 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.23 ± 0.10
MH1608	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20
MH2012	2.00 ± 0.20	1.20 ± 0.20	0.85 ± 0.20	0.50 ± 0.30

## ● FEATURES

- Advanced monolithic construction with high frequency ceramic and conductive materials
- Support operating frequency bands up to 10GHz
- Excellent reliability

## ● APPLICATIONS

- Wireless communications, cellular phone, cordless phone, pagers, etc.. Miscellaneous high-frequency circuits. EMI countermeasure in high-frequency circuits.

## ■ SCHEMATIC DIAGRAM :



## ■ FEATURES :

- Monolithic structure ensuring high performance and reliability.
- High frequency applications up to 6GHz.

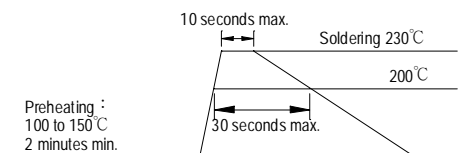
## ■ APPLICATIONS :

- RF modules for telecommunication systems including GSM, PCS, DECT, WLAN, Bluetooth, etc.

## ■ GENERAL SPECIFICATION :

- Storage temp. : -55°C ---- +100°C
- Operating temp. : -40°C ---- +100°C
- Solderability : Preheat 150°C . 60 sec  
 Solder : H63A  
 Solder temp. : 230± 5°C  
 Flux : Rosin  
 Dip time : 4± 1 sec

## Recommended Soldering Conditions Reflow Solderings



**ELECTRICAL CHARACTERISTICS :**

**MH1005 Series**

DWG No.	L (nH)	Tolerance	Q min	L / Q Test Freq. (MHz)	SRF (MHz) nom	RDC ( $\Omega$ ) max	IDC (mA) max
MH10051N0□S□	1.0	S	8	100	>15000	0.12	300
MH10051N2□S□	1.2	S	8	100	>15000	0.12	300
MH10051N5□S□	1.5	S	8	100	>15000	0.13	300
MH10051N8□S□	1.8	S	8	100	14000	0.14	300
MH10052N2□S□	2.2	S	8	100	12000	0.16	300
MH10052N7□S□	2.7	S	8	100	9500	0.17	300
MH10053N3□S□	3.3	S	8	100	8500	0.19	300
MH10053N9□S□	3.9	S	8	100	7000	0.22	300
MH10054N7□S□	4.7	S	8	100	6000	0.24	300
MH10055N6□S□	5.6	S	8	100	5400	0.27	300
MH10056N8□S□	6.8	J	8	100	5000	0.32	250
MH10058N2□S□	8.2	J	8	100	4600	0.40	250
MH100510N□S□	10.0	J	8	100	3700	0.45	250
MH100512N□S□	12.0	J	8	100	3200	0.50	250
MH100515N□S□	15.0	J	8	100	3100	0.60	250
MH100518N□S□	18.0	J	8	100	2900	0.65	200
MH100522N□S□	22.0	J	8	100	2100	0.80	200
MH100527N□S□	27.0	J	8	100	1900	0.90	200
MH100533N□S□	33.0	J	8	100	1600	1.00	200
MH100539N□S□	39.0	J	8	100	1400	1.20	150
MH100547N□S□	47.0	J	8	100	1200	1.30	150
MH100556N□S□	56.0	J	8	100	1100	2.00	150
MH100568N□S□	68.0	J	8	100	1000	2.20	100
MH100582N□S□	82.0	J	8	100	900	2.50	100
MH1005R10□S□	100.0	J	8	100	850	2.50	100
MH1005R12□S□	120.0	J	8	100	750	2.50	100

1).Tolerance Code : S :  $\pm 0.3$  nH J :  $\pm 5\%$

2). □ : Packaging Information... [A]: Bulk [B]: Taping Reel

● MH1608 Series

DWG No.	L (nH)	Tolerance	Q min	L / Q Test Freq. (MHz)	SRF (MHz) nom	RDC ( $\Omega$ ) max	IDC (mA) max
MH16081N0□S□	1.0	S	8	100	>17000	0.10	300
MH16081N2□S□	1.2	S	8	100	>17000	0.10	300
MH16081N5□S□	1.5	S	8	100	>17000	0.10	300
MH16081N8□S□	1.8	S	8	100	13000	0.15	300
MH16082N2□S□	2.2	S	8	100	12000	0.15	300
MH16082N7□S□	2.7	S	8	100	8600	0.20	300
MH16083N3□S□	3.3	S	8	100	6500	0.25	300
MH16083N9□S□	3.9	S	8	100	6300	0.25	300
MH16084N7□S□	4.7	S	8	100	5400	0.30	300
MH16085N6□S□	5.6	S	8	100	4600	0.30	300
MH16086N8□S□	6.8	J	8	100	4500	0.35	300
MH16088N2□S□	8.2	J	8	100	3800	0.40	300
MH160810N□S□	10.0	J	8	100	3700	0.45	300
MH160812N□S□	12.0	J	8	100	3200	0.50	300
MH160815N□S□	15.0	J	8	100	2900	0.55	300
MH160818N□S□	18.0	J	10	100	2100	0.60	300
MH160822N□S□	22.0	J	10	100	2100	0.65	300
MH160827N□S□	27.0	J	10	100	2000	0.70	300
MH160833N□S□	33.0	J	10	100	1600	0.80	300
MH160839N□S□	39.0	J	10	100	1500	0.85	300
MH160847N□S□	47.0	J	12	100	1200	1.00	300
MH160856N□S□	56.0	J	12	100	1100	1.10	300
MH160868N□S□	68.0	J	12	100	1000	1.20	300
MH160882N□S□	82.0	J	12	100	850	1.80	300
MH1608R10□S□	100.0	J	12	100	750	2.00	300
MH1608R12□S□	120.0	J	8	50	700	2.30	300
MH1608R15□S□	150.0	J	8	50	650	2.40	300
MH1608R18□S□	180.0	J	8	50	550	2.70	300
MH1608R22□S□	220.0	J	8	50	450	2.80	300

1). Tolerance Code : S :  $\pm 0.3$  nH J :  $\pm 5\%$

2). □ : Packaging Information... [A]: Bulk [B]: Taping Reel

● MH2012 Series

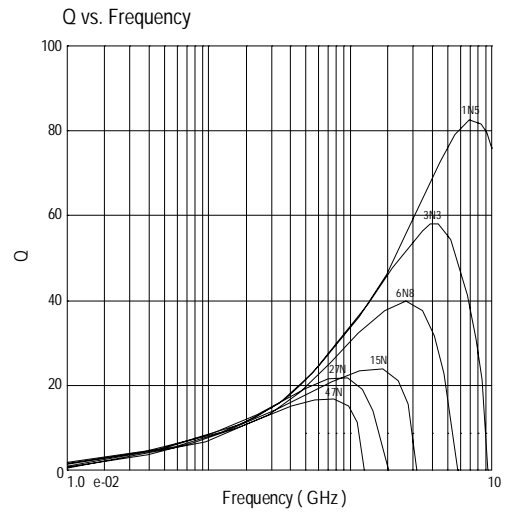
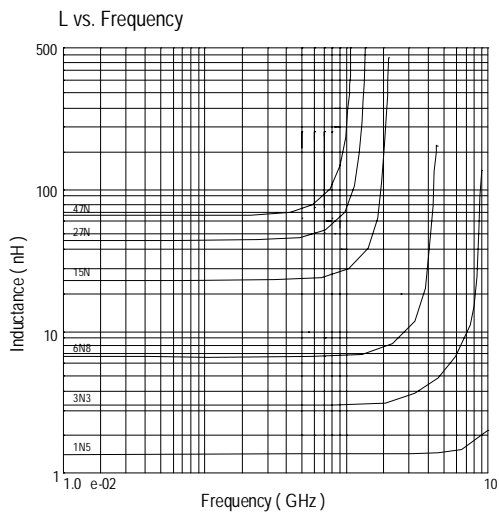
DWG No.	L (nH)	Tolerance	Q min	L/Q Test Freq. (MHz)	SRF (MHz) nom	RDC ( $\Omega$ ) max	IDC (mA) max
MH20121N2□S□	1.0	S	10	100	>6000	0.10	300
MH20121N5□S□	1.2	S	10	100	>6000	0.10	300
MH20121N8□S□	1.8	S	10	100	>6000	0.10	300
MH20122N2□S□	2.2	S	10	100	>6000	0.10	300
MH20122N7□S□	2.7	S	12	100	>6000	0.12	300
MH20123N3□S□	3.3	S	12	100	>6000	0.13	300
MH20123N9□S□	3.9	S	12	100	5600	0.15	300
MH20124N7□S□	4.7	S	12	100	5500	0.20	300
MH20125N6□S□	5.6	S	12	100	4700	0.23	300
MH20126N8□S□	6.8	J	15	100	3900	0.25	300
MH20128N2□S□	8.2	J	15	100	3200	0.28	300
MH201210N□S□	10.0	J	15	100	3100	0.30	300
MH201212N□S□	12.0	J	15	100	2800	0.35	300
MH201215N□S□	15.0	J	15	100	2400	0.40	300
MH201218N□S□	18.0	J	15	100	2100	0.45	300
MH201222N□S□	22.0	J	15	100	2000	0.50	300
MH201227N□S□	27.0	J	15	100	1800	0.55	300
MH201233N□S□	33.0	J	15	100	1700	0.60	300
MH201239N□S□	39.0	J	18	100	1400	0.65	300
MH201247N□S□	47.0	J	18	100	1200	0.70	300
MH201256N□S□	56.0	J	18	100	1000	0.75	300
MH201268N□S□	68.0	J	18	100	900	0.80	300
MH201282N□S□	82.0	J	18	100	900	0.85	300
MH2012R10□S□	100.0	J	18	100	700	0.90	300
MH2012R12□S□	120.0	J	13	50	600	0.95	300
MH2012R15□S□	150.0	J	13	50	500	1.00	300
MH2012R18□S□	180.0	J	13	50	430	1.10	300
MH2012R22□S□	220.0	J	12	50	400	1.20	300
MH2012R27□S□	270.0	J	12	50	340	1.30	300
MH2012R33□S□	330.0	J	12	50	320	1.50	300
MH2012R39□S□	390.0	J	10	50	270	1.60	300
MH2012R47□S□	470.0	J	10	50	250	1.80	300
MH2012R56□S□	560.0	J	10	50	230	2.50	300
MH2012R68□S□	680.0	J	10	50	180	3.00	300

1).Tolerance Code : S :  $\pm 0.3$  nH J :  $\pm 5\%$

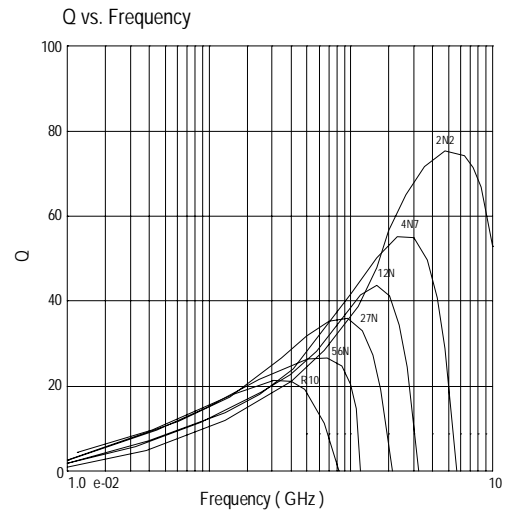
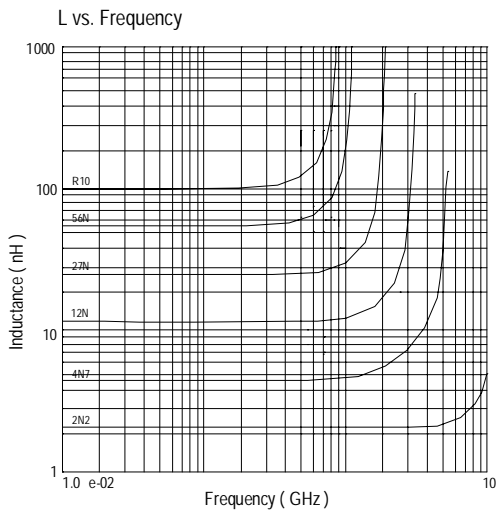
2). □ : Packaging Information... [A]: Bulk [B]: Taping Reel

■ L / Q VS. FREQ. CURVE :

● MH1005 Series



● MH1608 Series



● MH2012 Series

