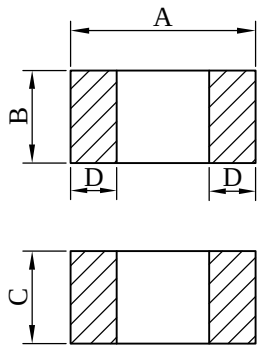
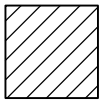
SPECIFICATION FOR APPROVAL

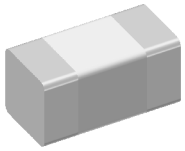
REF. :

PROD. NAME	Multilayer Chip Inductor	ABC'S DWG NO.	MH1608□□□□L□-□□□		
		REV.	20150424-F	PAGE	1

Ⅰ．Configuration and dimensions：







Unit：m/m

A	B	C	D
1.60 ± 0.20	0.80 ± 0.20	0.80 ± 0.20	0.30 ± 0.20

Ⅱ．Materials：

a．Body：Ceramic
b．Internal conductor：Silver
c．Terminal electrode：Ag / Ni / Sn
d．Product weight：5.4 mg（ref.）
e．Products comply with RoHS' requirements
f．Halogen free available.

Ⅲ．General specification：

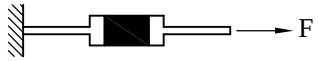
a．Storage Conditions：

Electrical Performance temp：-55℃ ---- +125℃

Terminal Solderability & Packages Material temp：-10℃ ---- +40℃ and RH 70% max.

b．Operating temp.：-55℃ ---- +125℃

c．Terminal strength：



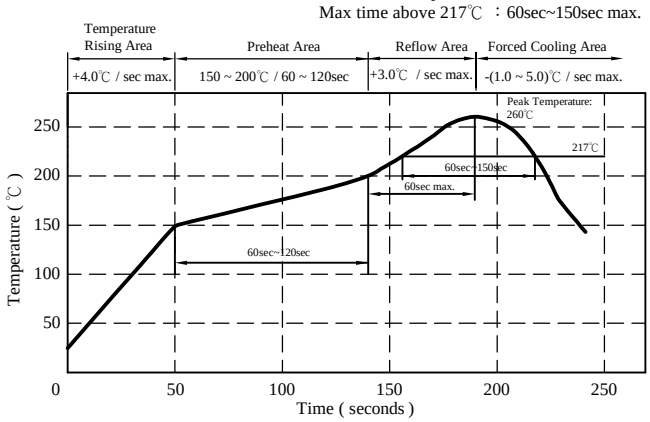
Type	F (kgf)	Time (sec)
MH1608	0.5	30±5

d．Resistance to soldering heat：

Solder temp. : 260℃

Dip time :10 sec max.

Peak Temp：260℃ max.
Max. Peak Temp - 5℃：30sec max.
Max time above 217℃ ：60sec~150sec max.



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Ⅳ . Electrical characteristics：

DWG No.	Inductance (nH)	Q min.	L / Q Test Freq. (MHz)	SRF (MHz) typ.	RDC (Ω) max.	IDC (mA) max.
MH16081N0DL□-□□□	1.0 ± 0.3	8	100	10000	0.10	600
MH16081N2DL□-□□□	1.2 ± 0.3	8	100	10000	0.10	600
MH16081N5DL□-□□□	1.5 ± 0.3	8	100	8000	0.10	600
MH16081N8DL□-□□□	1.8 ± 0.3	8	100	8000	0.10	600
MH16082N2DL□-□□□	2.2 ± 0.3	8	100	7200	0.10	600
MH16082N7DL□-□□□	2.7 ± 0.3	10	100	6200	0.10	600
MH16083N3DL□-□□□	3.3 ± 0.3	10	100	5200	0.12	600
MH16083N9DL□-□□□	3.9 ± 0.3	10	100	5000	0.14	600
MH16084N7DL□-□□□	4.7 ± 0.3	10	100	4750	0.16	600
MH16085N6DL□-□□□	5.6 ± 0.3	10	100	4100	0.18	600
MH16086N8JL□-□□□	6.8 ± 5%	10	100	3750	0.22	600
MH16088N2JL□-□□□	8.2 ± 5%	10	100	3300	0.24	600
MH160810NJL□-□□□	10.0 ± 5%	12	100	3000	0.26	600
MH160812NJL□-□□□	12.0 ± 5%	12	100	2600	0.28	600
MH160815NJL□-□□□	15.0 ± 5%	12	100	2500	0.32	600
MH160818NJL□-□□□	18.0 ± 5%	12	100	2400	0.35	600
MH160822NJL□-□□□	22.0 ± 5%	12	100	2000	0.40	500
MH160827NJL□-□□□	27.0 ± 5%	12	100	1900	0.45	500
MH160833NJL□-□□□	33.0 ± 5%	12	100	1600	0.55	400
MH160839NJL□-□□□	39.0 ± 5%	12	100	1400	0.60	400
MH160847NJL□-□□□	47.0 ± 5%	12	100	1300	0.70	400
MH160856NJL□-□□□	56.0 ± 5%	12	100	1100	0.75	400
MH160862NJL□-□□□	62.0 ± 5%	12	100	1050	0.85	400
MH160868NJL□-□□□	68.0 ± 5%	12	100	1050	0.85	400
MH160882NJL□-□□□	82.0 ± 5%	12	100	900	1.00	300
MH1608R10JL□-□□□	100.0 ± 5%	12	100	770	1.20	300
MH1608R12JL□-□□□	120.0 ± 5%	8	50	850	1.30	300
MH1608R15JL□-□□□	150.0 ± 5%	8	50	550	1.70	250
MH1608R18JL□-□□□	180.0 ± 5%	8	50	520	1.90	250
MH1608R22JL□-□□□	220.0 ± 5%	8	50	500	2.00	250

1). □：Packaging information：□ Code

2). "-□□□"：Reference code

3). Electrical specifications at 25℃

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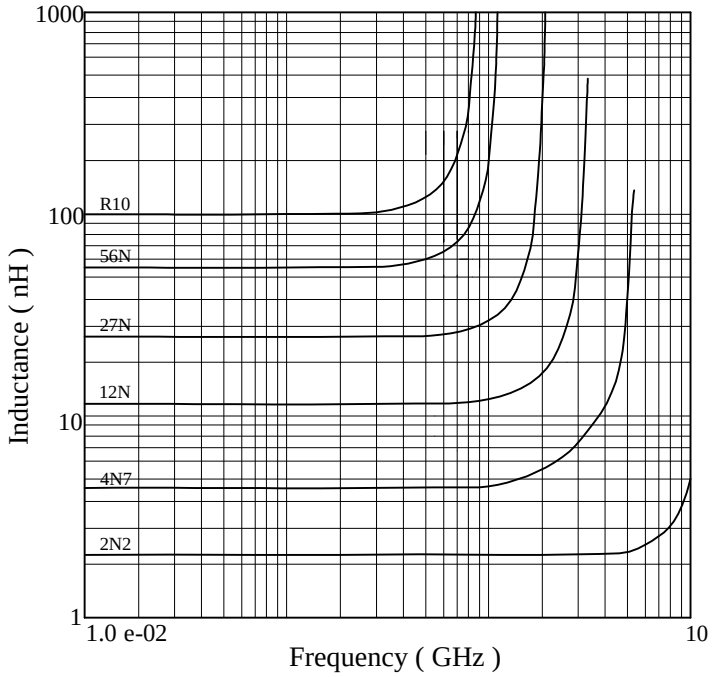
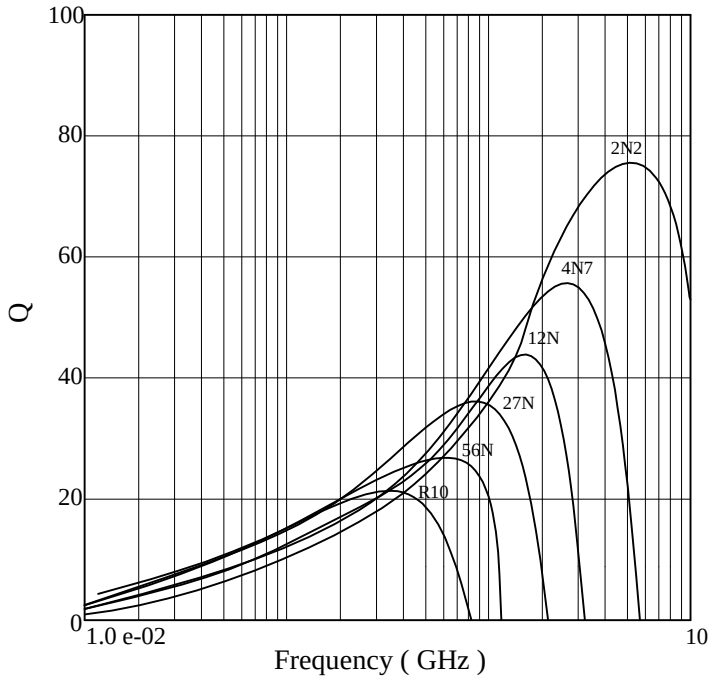
V ．Curve：

L vs. Frequency



Q vs. Frequency



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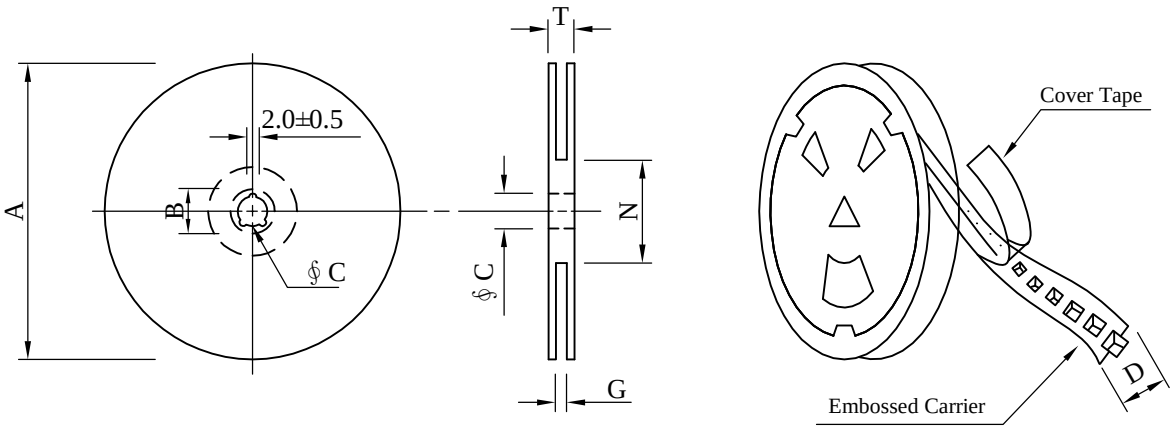
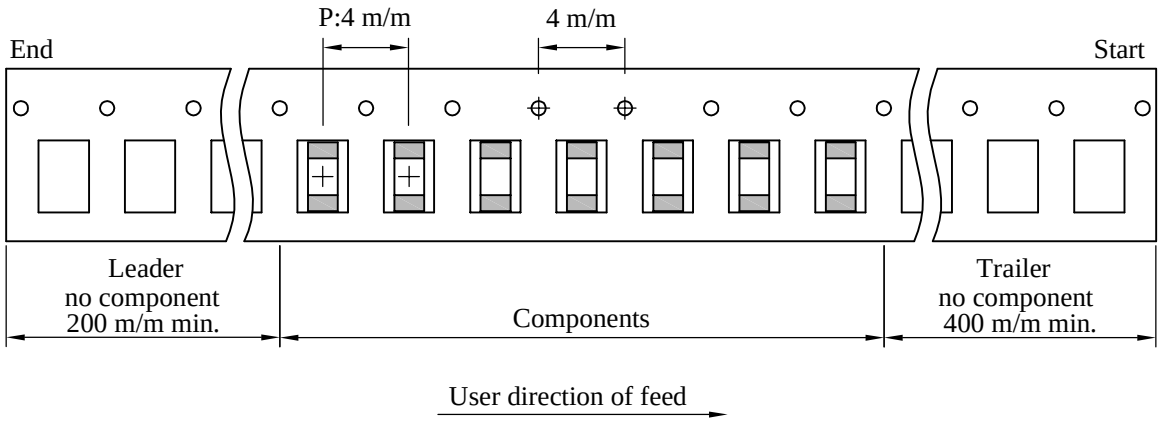
Ⅵ . Packaging information：

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 08	178	21±0.8	13	8	10^{+0}	50^{-0}	12.5

(3) Q'TY & G.W. Per package

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	4,000	90	07 - 08	200,000	7.0	41 x 39 x 22

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Ⅶ．Reliability test：

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125℃ 2.Time:1008 hours. 3.Measurement：After placing for 24 hours min.	1.Body: No damage 2.Inductance shall not change more than ±20%.
2.Low Temperature Exposure	JESD22-A 119	1.Temperature: -55℃ 2.Time:1008 hours. 3.Measurement：After placing for 24 hours min.	1.Body: No damage 2.Inductance shall not change more than ±20%.
3.Temperature Cycling	JESD22-A 104	1.Temperature: -55℃ ~ 125℃ 2.Number of cycle:100 cycle 3.Dwell time:30 minutes 4.Measurement：After placing for 24 hours min.	1.Body: No damage 2.Inductance shall not change more than ±20%.
4.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature:40±5 ℃ 2.Time:1008 Hours 3.Humidity: 95% RH. 4.Measurement：After placing for 24 hours min.	1.Bodye: No damage 2.Inductance shall not change more than ±20%.
5.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitued : 10-55-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total.	Appearance: No damage
6.Resistance To Soldering Heat Test	MIL-STD-202 Method 210	1.Solder Temp. : 265±3℃ 2.Immersion time : 6±1 sec 3.Preheating : 100℃ to 150℃, 1 minute. 4.Measurement：After placing for 24 hours min.	1.Appearance: No damage 2.Inductance shall not change more than ±20%.
7.Solderability Test	J-STD-002	1.Preheat：150℃,60 seconds 2.Solder temperature：245±5℃ 3.Flux 4.Dip time：4±1 seconds	The terminal shall be at least 90% covered with fresh solder.
8.Terminal Strength Test	IEC 60068-2-21	1.Apply push force to samples mounted on PCB. 2.Force: Refer to product specification. 3.Dwell time : >25 seconds.	The terminal electrode and the body shall not be damaged by the forces applied on the right conditions.
9.Board Flex	JIS-C-6429	1.Deflection speed：1 mm/ sec 2.Amount of deflection：2 mm 3.Span：90 mm 4.Direction for test：Bottom of PCB 5.Holding time : 60 seconds.	1.Appearance: No damage 2.The terminal electrode and the body shall not be damaged by the forces applied on the right conditions.