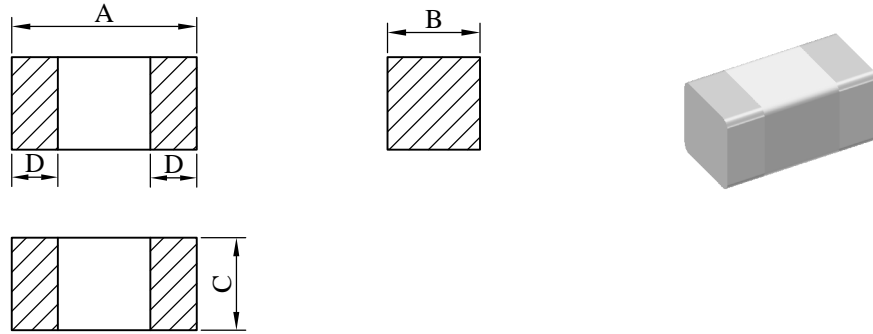


# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Multilayer Chip Inductor	ABC'S DWG NO.	MH1005□□□□2□-□□□		
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**I . Configuration and dimensions :**



Unit : m/m

A	B	C	D
1.00 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.20 ± 0.10

**II . Materials :**

- a . Body : Ceramic
- b . Internal conductor : Silver
- c . Terminal electrode : Ag / Ni / Sn
- d . Product weight : 1.3 mg (ref.)
- e . Products comply with RoHS' requirements
- f . Halogen free available.

**III . General specification :**

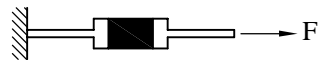
a . Storage Conditions :

Electrical Performance temp : -55°C ---- +125°C

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

b . Operating temp. : -55°C ---- +125°C

c . Terminal strength :

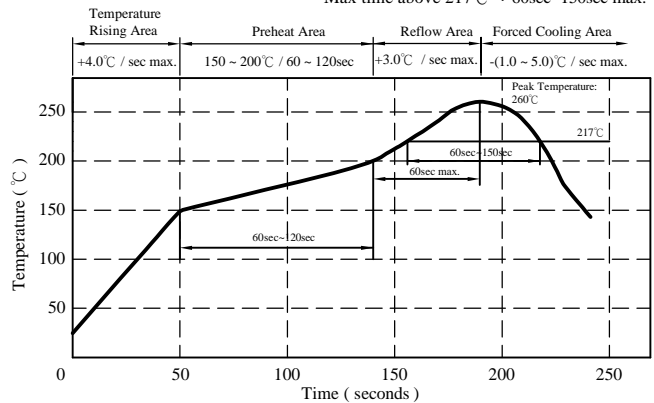


Type	F ( kgf )	Time ( sec )
MH1005	0.3	30±5

d . Resistance to soldering heat :

Solder temp. : 260°C  
Dip time : 10 sec max.

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



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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Multilayer Chip Inductor	ABC'S DWG NO.	MH1005□□□□2□-□□□		
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IV . Electrical characteristics :

DWG No.	Inductance (nH)	Q <sub>min</sub>	L / Q Test Freq. (MHz)	SRF (GHz) min	RDC (Ω) max	IDC (mA) max
MH10051N0D2□-□□□	1.0 ± 0.3	8	100	10.00	0.08	300
MH10051N2D2□-□□□	1.2 ± 0.3	8	100	10.00	0.09	300
MH10051N5D2□-□□□	1.5 ± 0.3	8	100	6.00	0.10	300
MH10051N8D2□-□□□	1.8 ± 0.3	8	100	6.00	0.12	300
MH10052N0D2□-□□□	2.0 ± 0.3	8	100	6.00	0.12	300
MH10052N2D2□-□□□	2.2 ± 0.3	8	100	6.00	0.13	300
MH10052N4D2□-□□□	2.4 ± 0.3	8	100	6.00	0.13	300
MH10052N7D2□-□□□	2.7 ± 0.3	8	100	6.00	0.13	300
MH10053N0D2□-□□□	3.0 ± 0.3	8	100	6.00	0.16	300
MH10053N3D2□-□□□	3.3 ± 0.3	8	100	6.00	0.16	300
MH10053N9D2□-□□□	3.9 ± 0.3	8	100	4.00	0.21	300
MH10054N7D2□-□□□	4.7 ± 0.3	8	100	4.00	0.21	300
MH10055N6D2□-□□□	5.6 ± 0.3	8	100	4.00	0.23	300
MH10056N8J2□-□□□	6.8 ± 5%	8	100	3.90	0.25	300
MH10058N2J2□-□□□	8.2 ± 5%	8	100	3.60	0.28	300
MH100510NJ2□-□□□	10.0 ± 5%	8	100	3.20	0.31	300
MH100512NJ2□-□□□	12.0 ± 5%	8	100	2.70	0.40	300
MH100515NJ2□-□□□	15.0 ± 5%	8	100	2.30	0.46	300
MH100518NJ2□-□□□	18.0 ± 5%	8	100	2.10	0.55	300
MH100522NJ2□-□□□	22.0 ± 5%	8	100	1.90	0.60	300
MH100527NJ2□-□□□	27.0 ± 5%	8	100	1.60	0.70	300
MH100533NJ2□-□□□	33.0 ± 5%	8	100	1.30	0.80	200

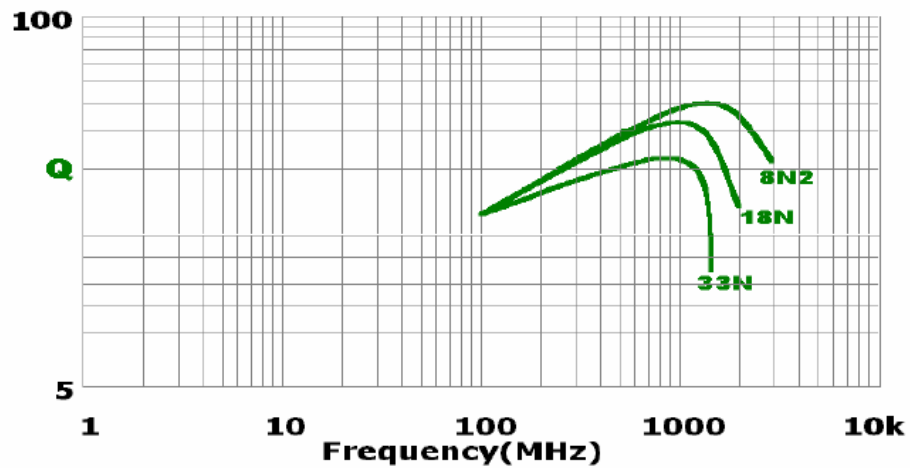
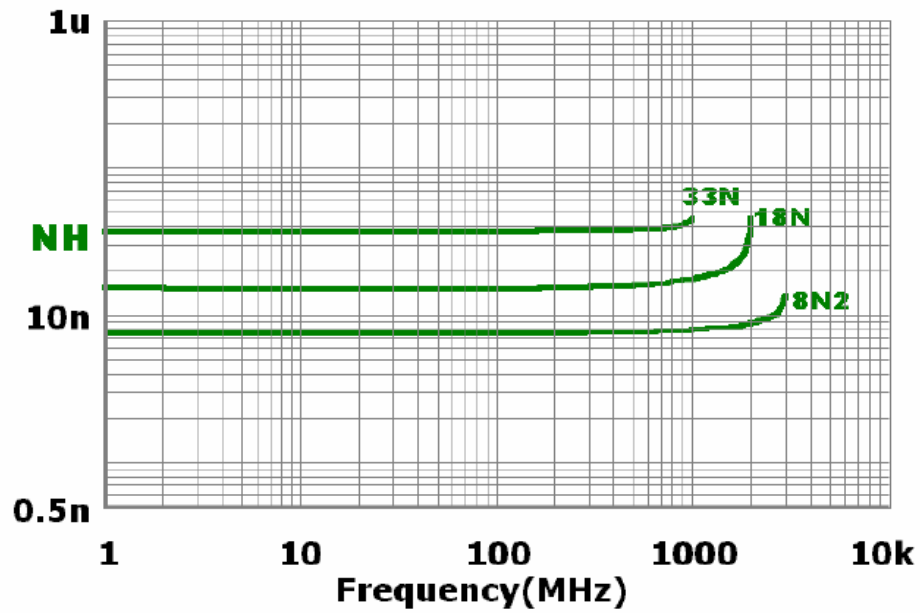
- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C

# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Multilayer Chip Inductor	ABC'S DWG NO.	MH1005□□□□2□-□□□		
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V . L / Q VS. Freq. Curve :



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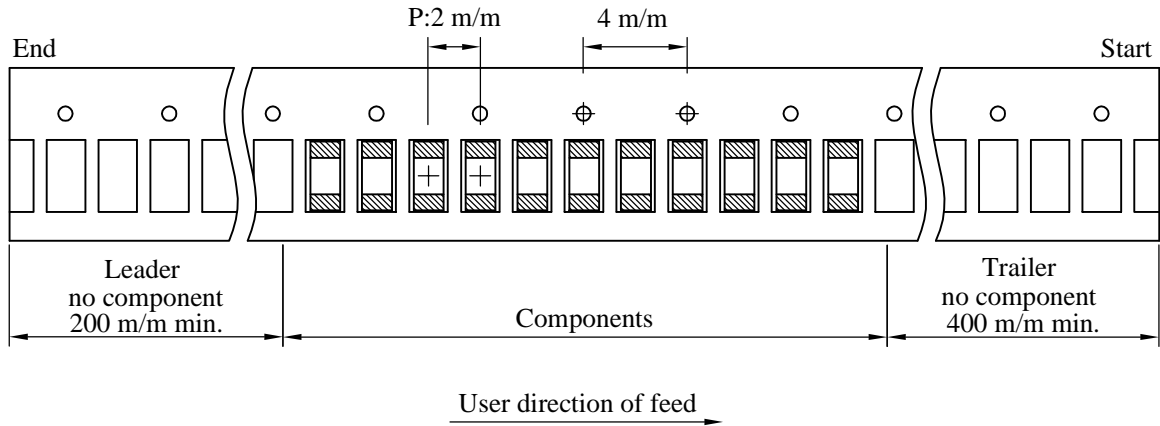
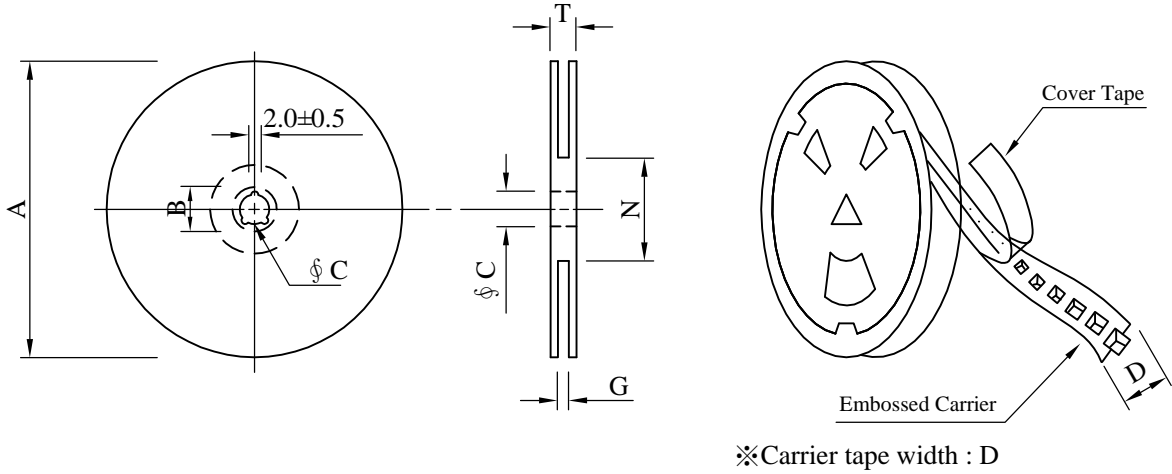
# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Multilayer Chip Inductor	ABC'S DWG NO.	MH1005□□□□2□-□□□		
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## VI . Packaging information :

### (1) Configuration



### (2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 08	178	21±0.8	13	8	10 <sup>+0</sup>	50 <sup>-0</sup>	12.5

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

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY(kpcs)	G.W. (Kg)	Size (cm)
B	10,000	60	07 - 08	500	5.5	42 x 41 x 24

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# SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Multilayer Chip Inductor	ABC'S DWG NO.	MH1005□□□□2□-□□□		
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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°C 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°C 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°C ~ 125°C 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 °C 2.Time:1008 Hours 3.Humidity: 95% RH. 4.Measurement : After placing for 24 hours min.	1.Body: 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°C 2.Immersion time : 6±1 sec 3.Preheating : 100°C to 150°C, 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°C,60 seconds 2.Solder temperature : 245±5°C 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.

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