



承認書

SPECIFICATION FOR APPROVAL

CUSTOMER:

DESCRIPTION:

Multilayer Chip Ferrite Inductors

PART NO:

MYH2012F4R7MT

CUST. PART NO:

REV. NO.

A0

DRAWING		
PREPARED	CHECKED	APPROVED
邹声平	卢嘉良	曾凡强
DATE:	2025/7/29	

CUSTOMER APPROVE



东莞市铭易轩电子科技有限公司

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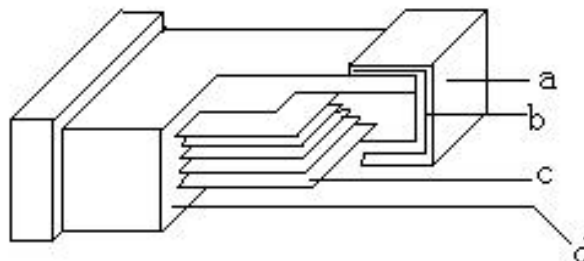
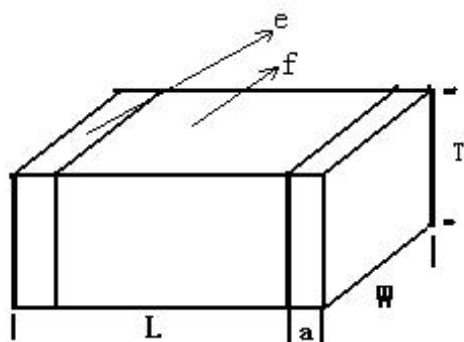


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[illegible]

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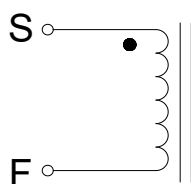
1. SHAPE & DIMENSION (UNIT:mm)



- a. 镀层 Ni/Sn plating
b. 银层 Ag layer
c. 内电极 Inner electrode
d. 瓷体 Body
e. 端电极 Terminal electrode
f. 瓷体 ferrite or ceramic

L	W	T	a
2.0	1.25	0.85	0.5
+0.3/-0.1	±0.20	±0.20	±0.3

2. SCHEMATIC



3. PART NUMBERING SYSTEM

MYH	2012	F	4R7	M	T
①	②	③	④	⑤	⑥

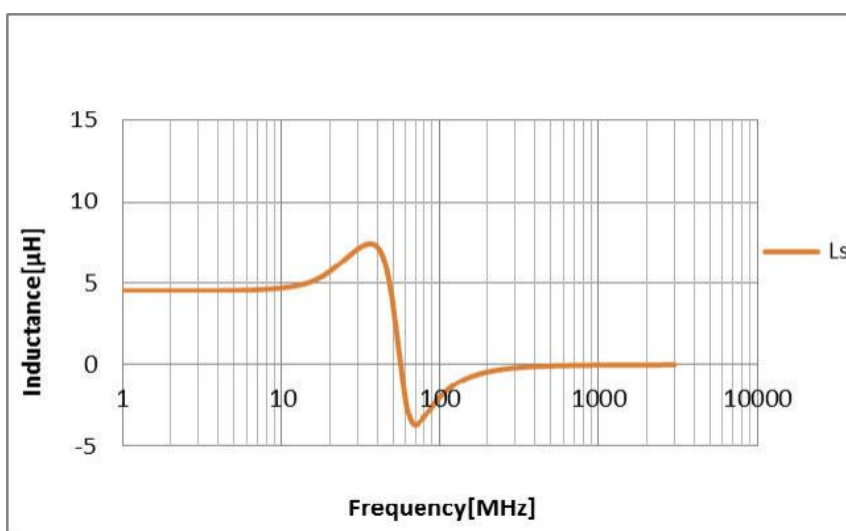
- ① PRODUCT SYMBOL (产品代号)
② DIMENSIONS (规格尺寸)
③ 材料代号 Material code: F
④ INDUCTANCE (电感量)
⑤ TOLERANCE (公差) : M±20%; N±30%
⑥ 包装 Packaging: 编带包装 Tape & Reel: T

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4. ELECTRICAL CHARACTERISTICS

No.	Part Number	Inductance	DCR(mΩ)	Test frequency	Test voltage	SRF	Idc
		(uH)	Max.	(MHz)	(mV)	(MHz) min	(mA)max
1	MYH2012F4R7MT	4.7μH±20%	320	1	50	25	750


Test remarks

- (1). All test data is referenced to 25 °C ambient.
- (2).Idc: DC current that causes the temperature rise ($\Delta T \leq 40^{\circ}\text{C}$) from 25°C ambient.

5. GENERAL SPECIFICATION

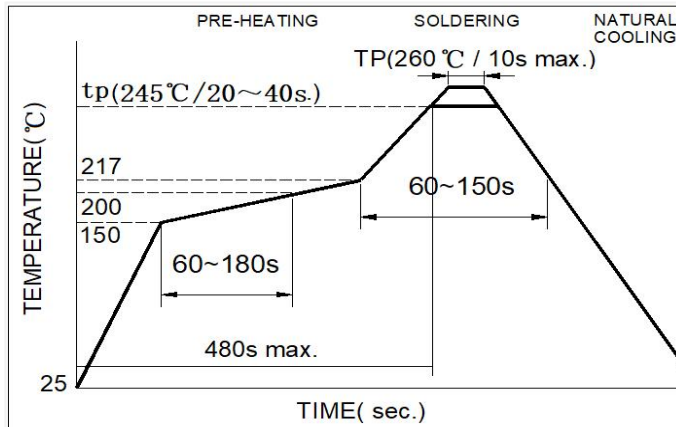
- (1). Operating temp.: -40°C ~ +125°C (Including self-generated heat).
- (2). Storage temp.: -10°C ~ +40°C R.H.:60% Max.
- (3). Recommended products should be used within 12 months from the date of delivery
- (4). The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

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6. SOLDERING CONDITIONS

Figure 1. Re-flow Soldering (Lead Free)



Note:

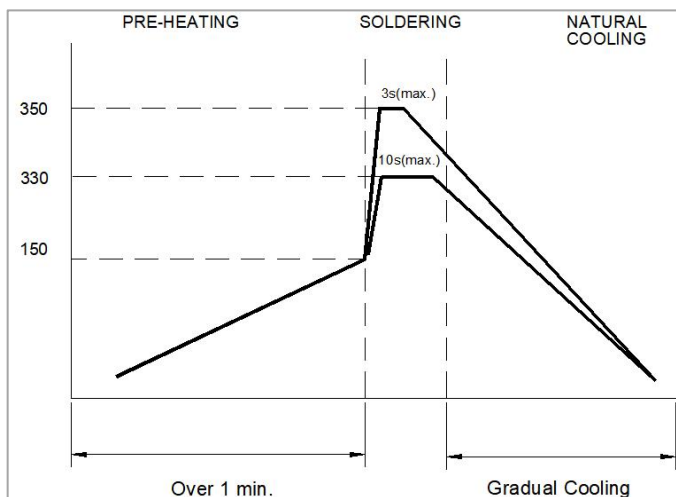
Preheat circuit and products to 150°C

260°C tip temperature (Max)

Reflow times: no more than 2 times

Solder paste thickness: the best 0.08mm is ,but max is 0.1mm

Figure 2. Hand Soldering



Note:

Use a 20 watt soldering iron with tip diameter of 1.0mm

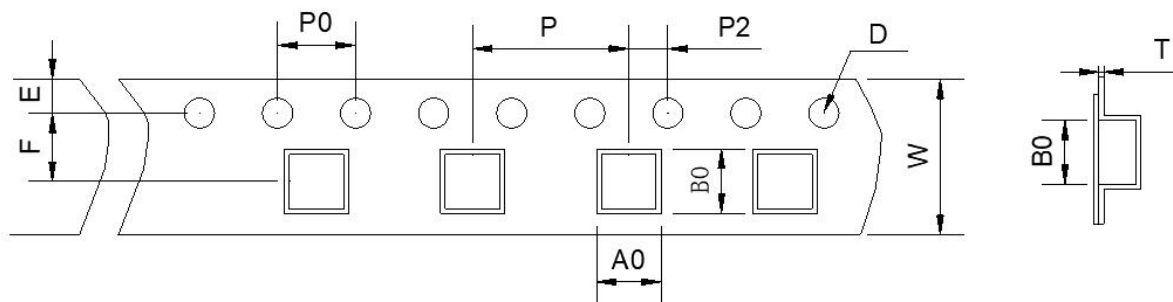
Limit soldering time to 3 sec.

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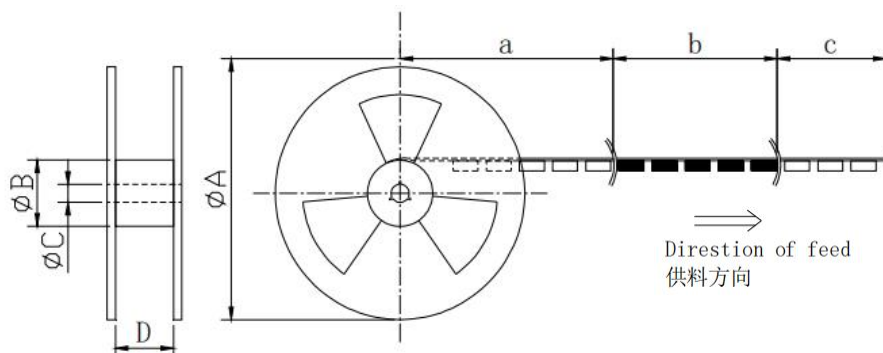
7. PACKAGE SPECIFICATION

(1). Paper tape Dimensions(Unit:mm)



W	A0	B0	D	E	F	P	P0	P2	T
8.0 ±0.2	1.5 ±0.2	2.3 ±0.2	1.55 ±0.1	1.75 ±0.2	3.5 ±0.1	4.0 ±0.2	4.0 ±0.2	2.0 ±0.1	0.95 ±0.1

(2). Reel Dimensions (Unit:mm)



Item	Dimension
A	178
B	24
C	13
D	8.5
a	Blank portions
b	Chip cavity
c	Leader

(3). Packaging Quantity

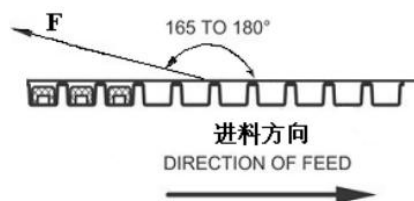
Reel (pcs)	Box (pcs)	Carton (pcs)
4000	40000	240,000

(4). Packaging -Cover Tape

F force: 10~130g

Peeling speed: 300mm/min±10%

Peeling angle: 165°~180°



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8. RELIABILITY

No.	Item	Requirements	Test Methods and Remarks
1	Operating Temperature Range	-40°C~+125°C	including the IRMS for surface of the products
2	Solder ability	At least 95% of terminal electrode should be covered with solder	Preheating temperature:120°C to 150°C Preheating time: 60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder. Solder temperature: 245±5°C Immersion tin depth:10mm Duration : 5±1s Dip performance to a flux of about:3 ~ 5 s
3	Resistance to Soldering	At least 95% of terminal electrode should be covered with solder. No mechanical damage. Inductance : U : change within ±20% X : change within ±25% J : change within ±30%	Preheating temperature: 120°C to 150°C Preheating time: 60s Solder 96.5%Sn/3.0%Ag/0.5%Cu of the Sn solder. Solder temperature: 260°C±5°C Immersion tin depth:10mm Duration : 10±1s Dip performance to a flux of about:3 ~ 5 s
4	Adhesion of electrode	The termination and body should be no damage	Applied force: 10N force for 2012 series. Keep time : 10±1S
5	Low temperature resistance	No mechanical damage. Inductance change: within ±20%	Temperature:-40±2°C Testing time:1000+24/-0 h
6	Bending strength	No mechanical damage	Testing board: glass epoxy-resin substrate For 0.5 mm/s compression speed, curvature: 2mm, hold time20s±1s 。
7	Vibration	No mechanical damage. Inductance change: within ±20%	Amplitude modulation: 1.5mm Test time: A period of 2h in each of 3 mutually perpendicular directions. Frequency range: 10Hz to 55Hz to 10Hz for 1min.
8	High temperature resistance	No mechanical damage. Inductance change: within ±20%	Testing time: 1000+24/-0h Temperature: 125±2°C
9	Static Humidity	No mechanical damage. Inductance change: within ±20%	Humidity: 90% to 95% RH Temperature: 60°C±2°C Testing time: 1000+24/-0h
10	High temperature load	No mechanical damage. Inductance change: within ±20%	impose current: at room Testing time: 1000+24/-0h Temperature: 125±2°C
11	Temperature Shock	No mechanical damage. Inductance change: within ±20%	Temperature: -40°C for 30±3min +125°C for 30±3min Number of cycles: 32

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