



欧贝斯电子
OBEST ELECTRONICS

承 认 书

CUSTOMER

客户名称:

NUMBER

编号: 20210104

DESCRIPTION型 号: **AFRH74-470M****QUANTITY**

数量: 10PCS

PART NO.

品 名:

DHATE

日期: 2021.1.4

CUSTOMER PART NO.

客户料号:

NOTE

注解:

APPROVAL SIGNATURE

客户承认签章

APPROVED BY 核 准	Q.C.DEPT. 品 管	CHECKED BY 核 查	DRAWN BY 制 作

Rev.	Effective Date	Changed Contents	Change reasons	Approved By
A0	2021.1.4	New release	/	

SPECIFICATIONS

TYPE:

AFRH74-470M

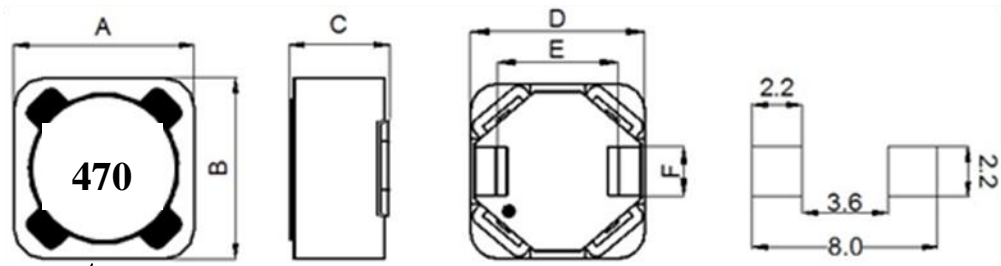
1. Scope

This specification apply for HSMRH74B of power inductors

2. Appearance

2-1.Dimensions(mm)

2-2.Recommended Land



A	7.5mm(Max)
B	7.5mm(Max)
C	4.5mm(Max)
D	$7.0 \pm 0.3\text{mm}$
E	3.9 mm (Ref)
F	2.0mm (Ref)

Font size: Width 2.9*High1.6(Black) Song
* Dimension without tolerance is approx.

3. Coils Specification

3-1. Connection (Bottom View)



“S” is winding start

3-2. Turns and Wire

Terminal	S-F
Turns	32.5 Ts
Wire	0.21mm G1 P180&2UEW-H

LEAD-FREE



* Winding Turns are approx.

Note:

Spec. No.

SPECIFICATIONS

TYPE:

AFRH74-470M

3-3. Electrical characteristics

Item	Specifications	Measuring Conditions	Measuring Instrument
Inductance	47 μ H \pm 20% Within	100KHz/0.25V	TH2816B
D.C.R	260m Ω MAX	25°C	VR131
I.D.C※	1.1A MAX	100KHz/0.25V	TH2816B&VR7210

※ This indicates the value of current when the inductance is 10% lower than its initial value at D.C superposition or D.C current when temperature rise $\Delta T=40^{\circ}\text{C}$ whichever is lower. ($T_a=20^{\circ}\text{C}$)

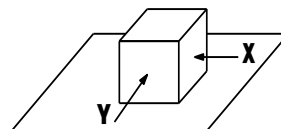
4. General Characteristics

4-1. Storage Temperature range : $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$

4-2. Operating temperature range: $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ (Including coil's self temperature rise)

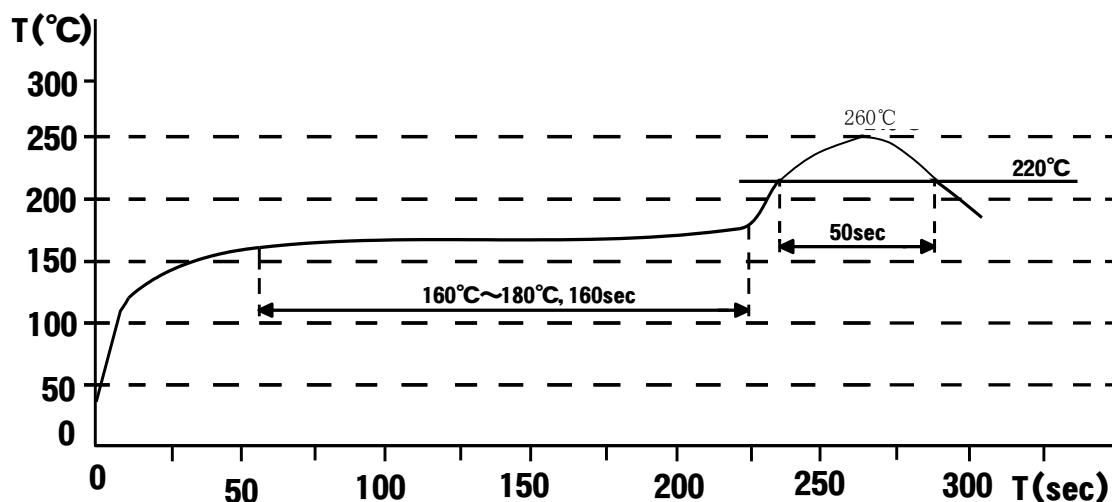
4-3. External appearance : No external defects can be found in the visual inspection.

4-4. Electrode strength : No electrode detachment should be found when the device is pushed in two directions of X and Y with the force of 5.0N for 10 ± 2 seconds after soldering between copper plate and the electrodes. (Refer to figure at right)



4-5. Vibration test : Inductance deviation is within $\pm 3.0\%$ after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down, right and left. The frequency is $10 \sim 55 \sim 10\text{Hz}$ and the amplitude of 1 minute cycle is 1.5mm PP.

4-6. Recommended reflow condition :



Note:

Spec. No.

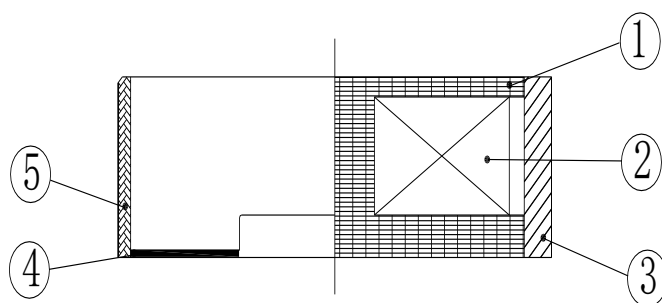
SPECIFICATIONS

TYPE:

AFRH74-470M

4-7.Humidity test : Inductance deviation is within $\pm 5.0\%$ after 96 ± 4 hours test under the condition of relative humidity of 90~95% and temperature of $40\pm 2^{\circ}\text{C}$, and 1 hour storage under room ambient conditions after the device is wiped with dry cloth.

5. Construction and materials



No.	Part name	Material	Remark
①	Drum Core	Ni-Zn Ferrite Core	
②	Wire	Polyurethane enameled copper wire	
③	Ring Core	Ni-Zn Ferrite Core	
④	Adhesive	Epoxy Resin	
⑤	Electrode	LCP (Cu + Sn) plating RH74	

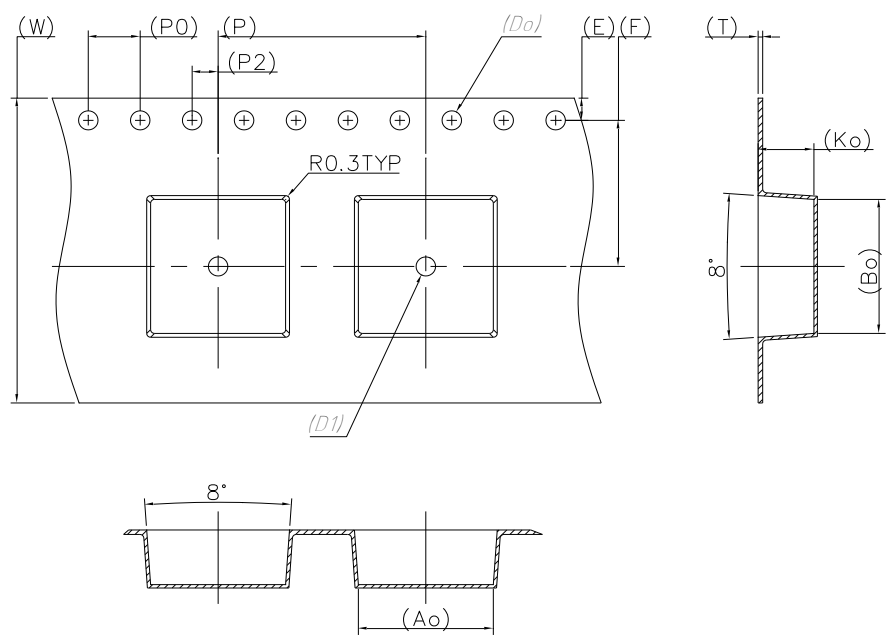
Note:

Spec. No.

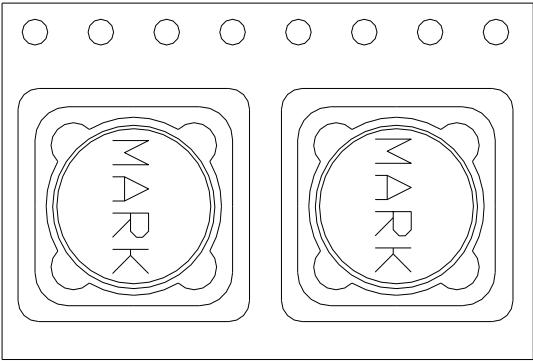
SPECIFICATIONS

TYPE:
AFRH74-470M

6. TAPE DIMENSIONS:



W	16.00±0.30	P	12.00±0.10	A0	7.90±0.10	B0	7.90±0.10
E	1.75±0.10	P0	4.00±0.10	T	0.40±0.05	D1	ø1.50 ^{+0.10} ₀
K0	4.80±0.10	P2	2.00±0.10	F	7.50±0.10	D0	ø1.50 ^{+0.10} ₀

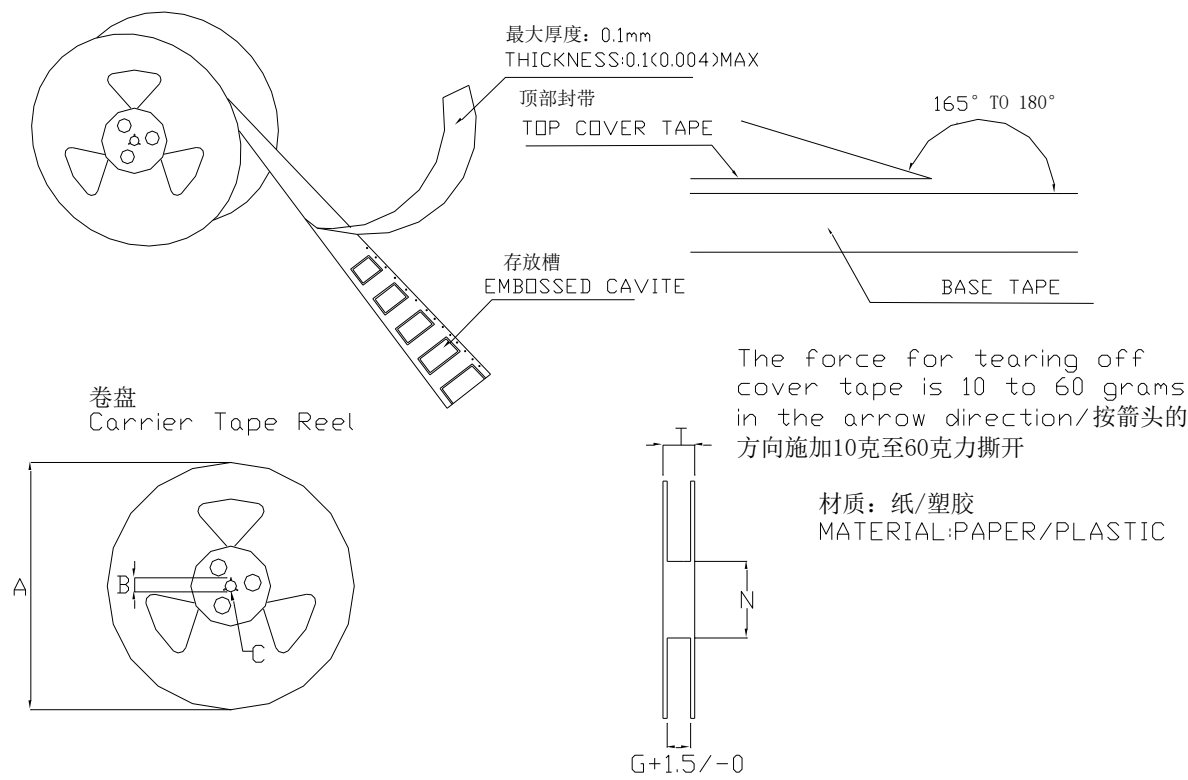


Note:	Spec. No.
	5/6

SPECIFICATIONS

TYPE:
AFRH74-470M

7. TAPE REEL DIMENSIONS:



单位: 毫米

Type	A	B	C	G	N	T
16mm	330	21±0.8	13±0.4	16.4	100	20.4

PACKAGING QUANTITY:
1000 PCS /REEL

Note:	Spec. No.
	6/6

