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CUSTOMER NUMBER		
客户名称:	编号: 20210104	
DESCRIPTION QUANTITY		
型 号: AFRH74B – 221M	数量: 10PCS	
PART NO.	DHATE	
品 名:	日期: 2021.1.4	
CUSTOMER PART NO.	NOTE	
客户料号: 注解:		

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

CUSTOMER:	SPECIFICATIONS	TYPE
	(Revisions)	AFRH74B - 221M

## **History of change**

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

Note:	Spec. No.	
		1/6

TYPE:

**AFRH74B - 221M** 

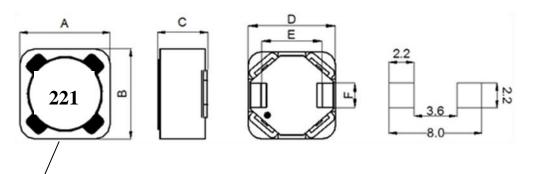
## 1. Scope

This specification apply for HSMRH74B of power inductors

## 2. Appearance

### 2-1.Dimensions(mm)

### 2-2.Recommended Land



A	7.5mm(Max)	
В	7.5mm(Max)	
С	4.5mm(Max)	
D	7.0±0.3mm	
Е	3.9 mm (Ref)	
F	2.0mm (Ref)	

Font size: Width 2.9\*High1.6(Black) Song

## 3. Coils Specification

3-1. Connection (Bottom View)



"S" is winding start

3-2. Turns and Wire

Terminal	S-F	
Turns	72.5 Ts	
Wire	0.15mm* G1 P180&2UEW-H	

\* Winding Turns are approx.





Note:	Spec. No.	
	2/0	

<sup>\*</sup> Dimension without tolerance is approx.

TYPE:

**AFRH74B - 221M** 

#### 3-3. Electronical characteristics

Item	Specifications	Measuring	Measuring
	of	Conditions	Instrument
Inductance	$220~\mu H \pm 20\%$ Within	100KHz/0.25V	TH2816B
D.C.R	1.17 m Ω MAX	25℃	VR131
I.D.C%	0.5A MAX	100KHz/0.25V	TH2816B&VR7210

<sup>%</sup> 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  $\Delta T=40^{\circ}$ C whichever is lower .(Ta=20°C)

#### 4. General Characteristics

4-1. Storage Temperature range :  $-40^{\circ}$ C  $\sim +100^{\circ}$ 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 forceof 5.0N for 10±2 seconds after soldering

between copper plate and the electrodes.(Refer to figure at right)

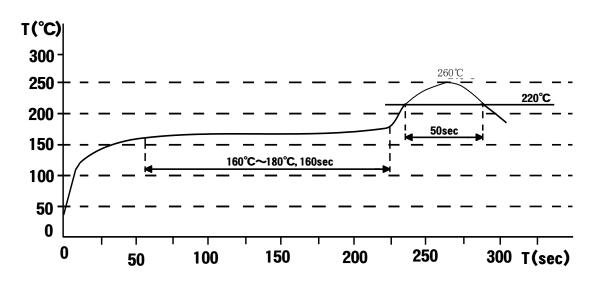
Y X

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  $10{\sim}55{\sim}10$ Hz and the amplitude of

1 minute cycle is 1.5mm PP.

#### 4-6.Recommended reflow condition:



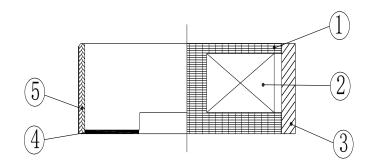
Note:	Spec. No.
	3/6

TYPE:

**AFRH74B – 221M** 

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

## 5. Construction and materials



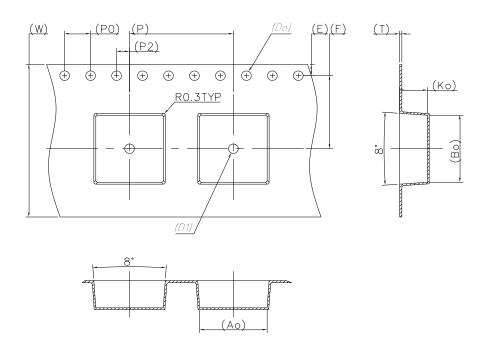
No.	Part name	Material	Remark
1)	Drum Core	Ni-Zn Ferrite Core	
2	Wire	Polyurethane enameled copper wire	
3	Ring Core	Ni-Zn Ferrite Core	
4	Adhesive	Epoxy Resin	
(5)	Electrode	LCP (Cu+Sn) plating RH74	

Note:	Spec. No. 4/6
	<del>4</del> /0

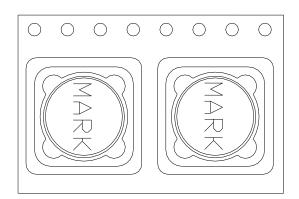
TYPE:

**AFRH74B – 221M** 

## **6. TAPE DIMENSIONS:**



W	16.00±0.30	Р	12.00±0.10	A0	7.90±0.10	В0	7.90±0.10
E	1.75±0.10	PO	4.00±0.10	T	0.40±0.05	D1	Ø1.50+0.10
KO	4.80±0.10	P2	2.00±0.10	F	7.50±0.10	DO	Ø1.50+0.10

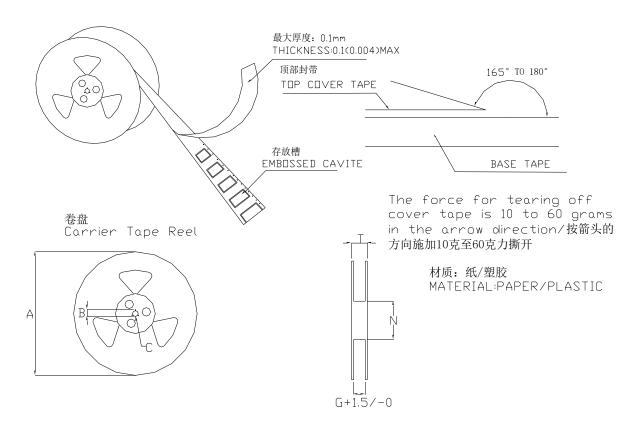


Note:	Spec. No.
	5/6

TYPE:

**AFRH74B - 221M** 

## 7. TAPE REEL DIMENSIONS:



单位:毫米

Type	A	В	C	G	N	T
16mm	330	$21 \pm 0.8$	$13 \pm 0.4$	16.4	100	20.4

PACKAGING QUANTITY: 1000 PCS /REEL

Note:	Spec. No.	
		6/6