

WUHAN YANXI MICRO-COMPONENT CO.,LTD.			
<b>DATE</b>	<b>July. 22. 2020</b>	<b>System</b>	
<b>Part Number</b>	<b>SR405MF5A001</b>	<b>Version 1.0</b>	<b>Original</b>

## 403MHz-408MHz Filter Standard Specifications



### Product Features

- Typical insertion loss in the pass band is less than 3.0dB
- Plastic Chip Scale Package(CSP)
- Miniature Size
  - 1.1 mm X 0.9 mm Footprint
  - 0.6mm Max Height
- RoHS compliant, Pb-free

### Applications

- 403MHz-408MHz bandpass filter
- Handsets
- Portable Hotspots
- Mobile Routers
- Smart Meters
- Access Points

### Description

It is a high-performance, high power Surface Acoustic Wave (SAW) band-pass filter with extremely steep skirts, simultaneously exhibiting low loss in the 403-408MHz band.

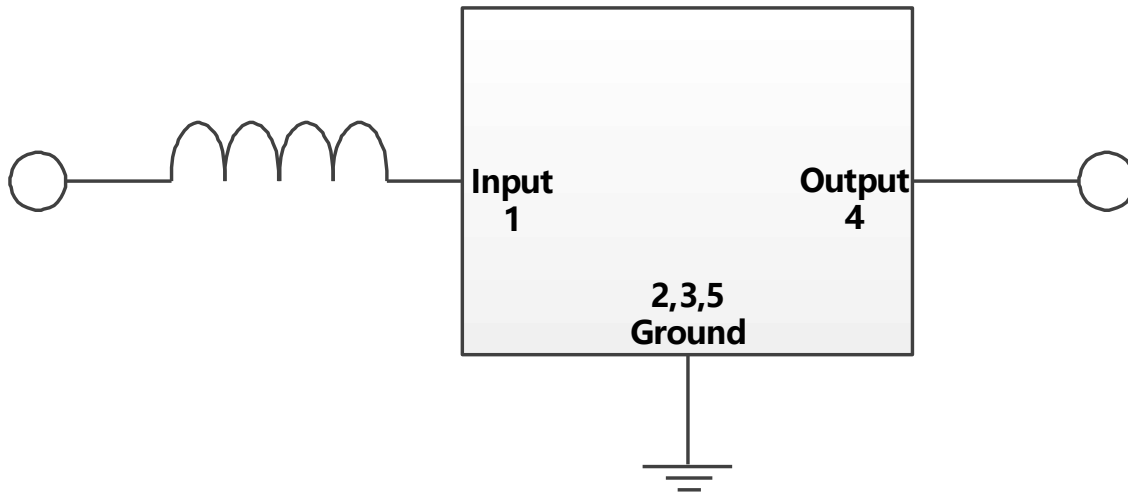
## Matching circuit

Input terminating impedance

$Z_{IN} = 50 \Omega$  with series 1 nH

Output terminating impedance

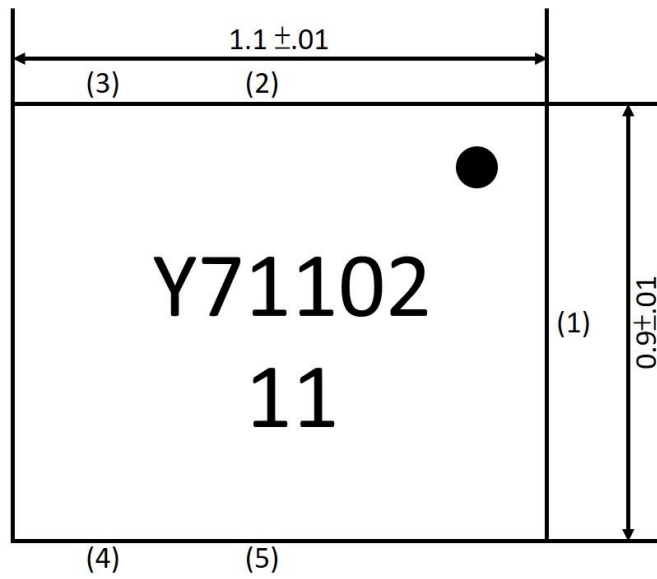
$Z_{OUT} = 50 \Omega$



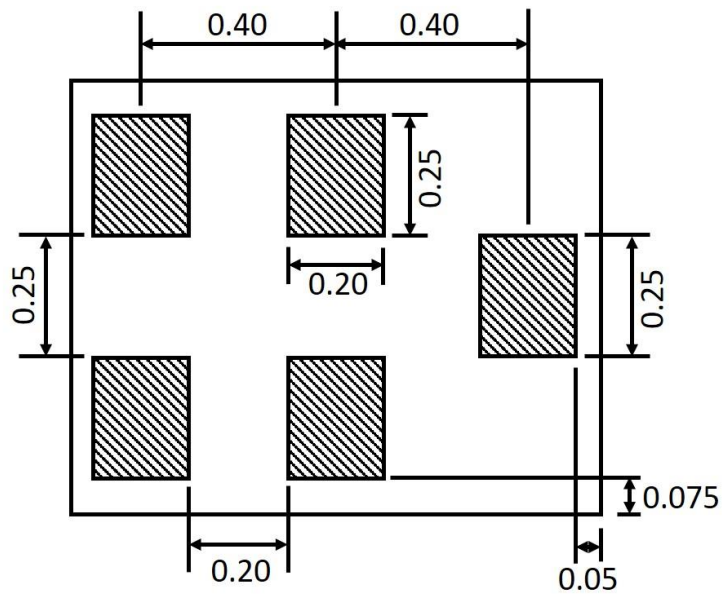
## General Description

Pin No.	Symbol	DESCRIPTION
1	IN	RF input
2	GND	Ground connection
3	GND	Ground connection
4	OUT	ANT Antenna Port
5	GND	Ground connection

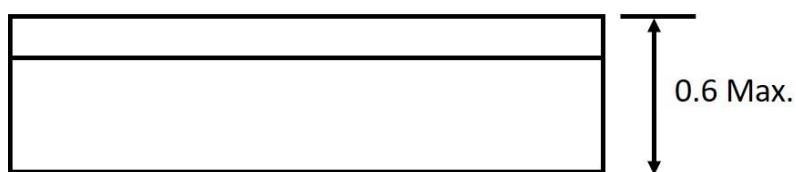
### Top View



### Bottom View



### Side View

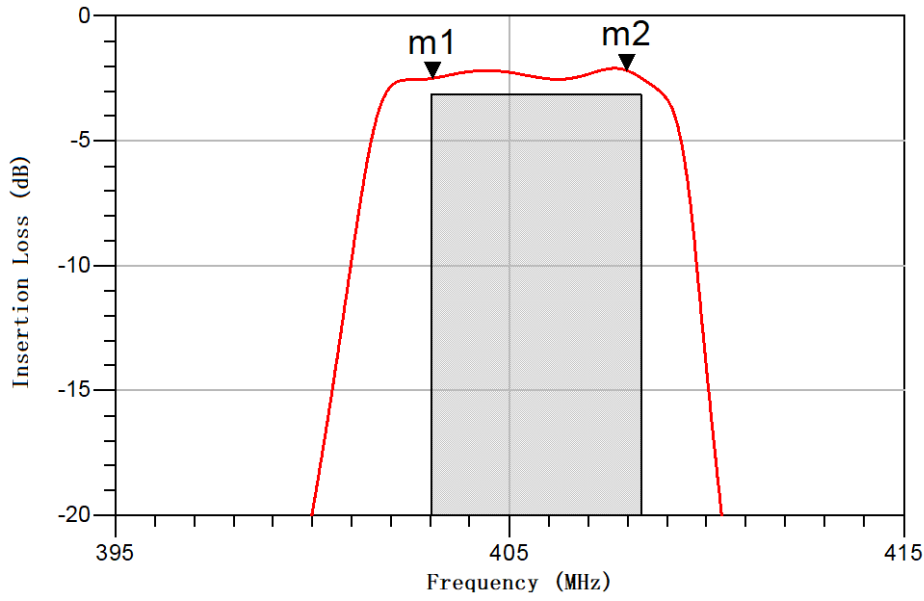


## Electrical Specifications

Characteristics	Unit	Min	Typ <sup>(1)</sup>	Max
<b>Bandpass Filter (403~408 MHz)</b>		<b>@+25° C</b>		
<b>Insertion Loss</b>		<b>dB</b>		
Insertion loss	403~408MHz	-	3.0	3.0@-40~+85°C
Amplitude Ripple	403~408 MHz	-	1.0	2.0@-40~+80°C
Input / Output VSWR	403~408 MHz	-	-	2.0
<b>Minimum Attenuation</b>		<b>dB</b>		
	DC~395MHz	45	50	-
	413~418MHz	30	43	-
	418~430MHz	40	45	
	430~800MHz	50	55	
	800~1500MHz	45	50	-
	1500~2000MHz	25	30	-
<b>Input / Output</b>				
Input / Output Impedance		<b>Ω</b>	50	
Maximum Input Power		<b>dBm</b>	20	-
<b>Operating Conditions</b>				
Operating Temperature		<b>°C</b>	-40°C ~ +85°C	
Relative Humidity		<b>%</b>	10% ~ 90%	
Air Pressure		<b>KPa</b>	86 ~ 106	

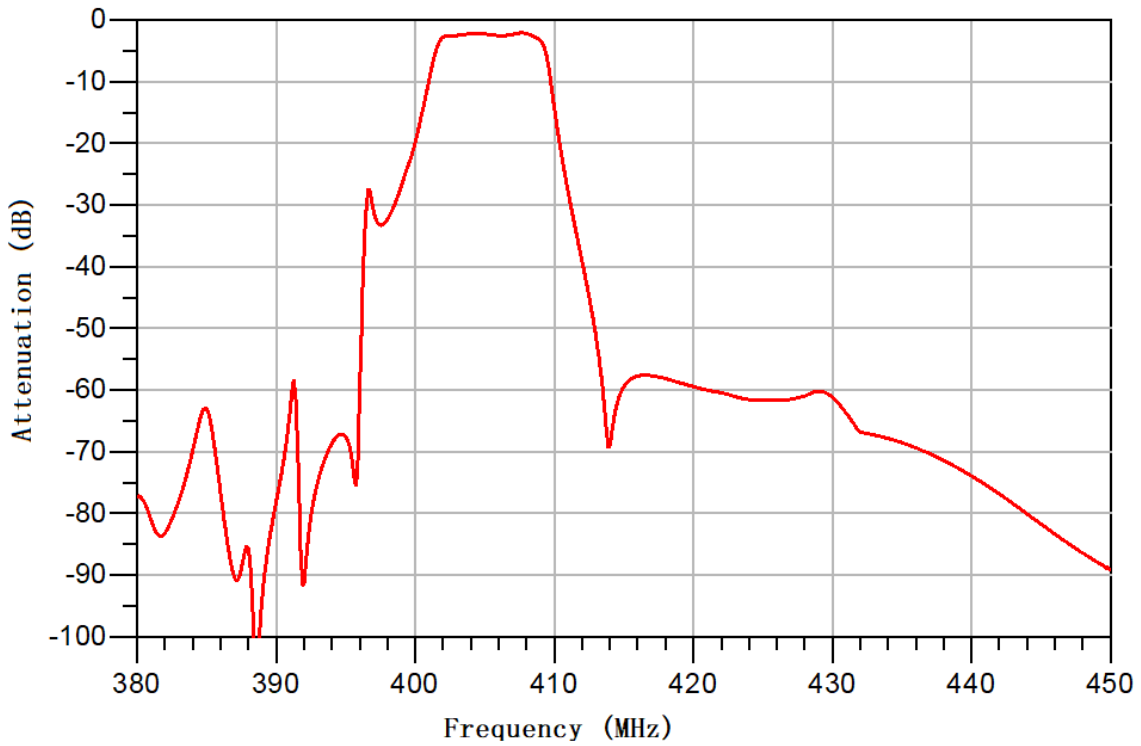
(1) : The typical value is average value of each frequency band.

### Transmission coefficient



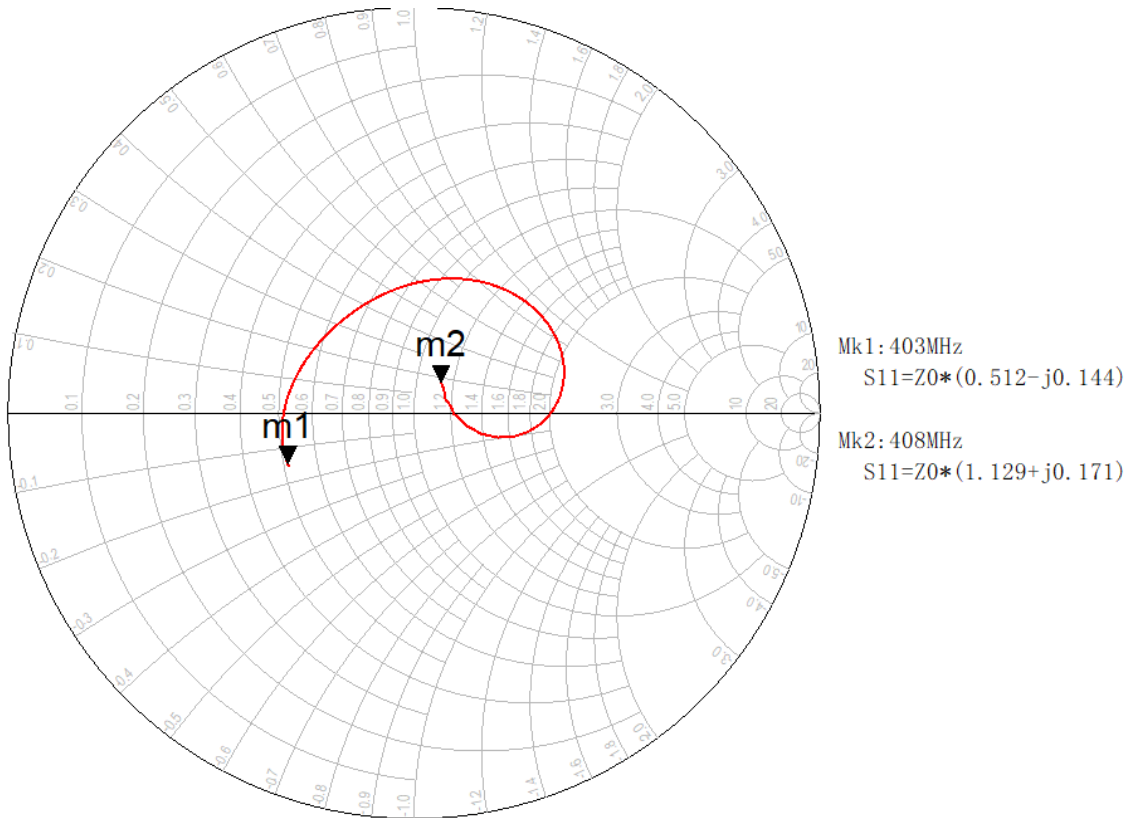
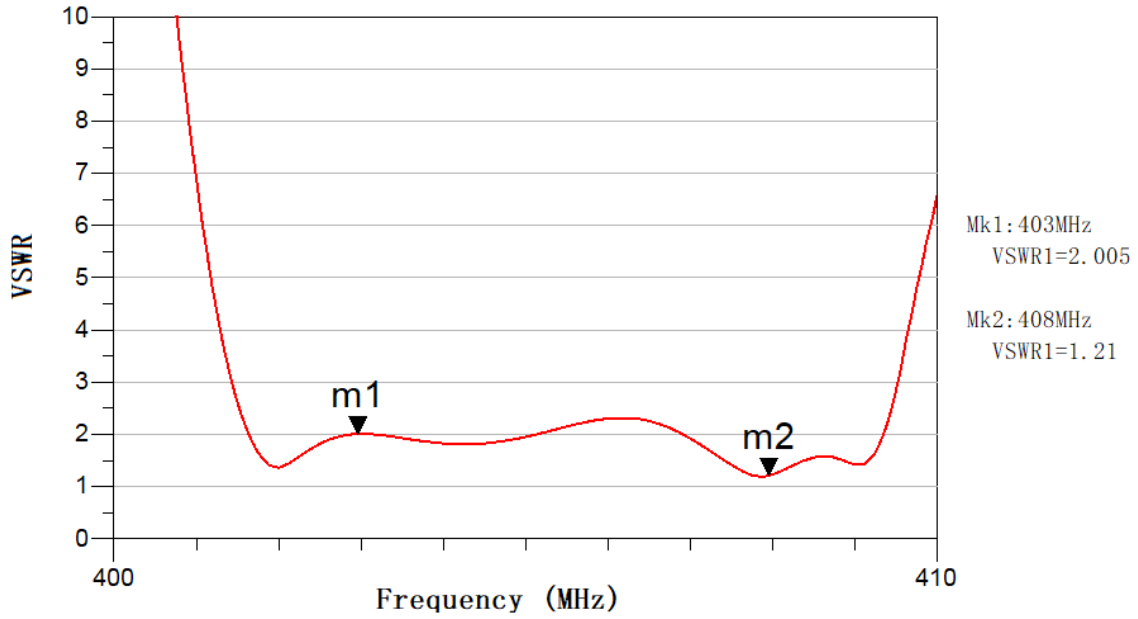
m1  
freq=403.0MHz  
dB(S(2,1))=-2.504

m2  
freq=408.0MHz  
dB(S(2,1))=-2.189



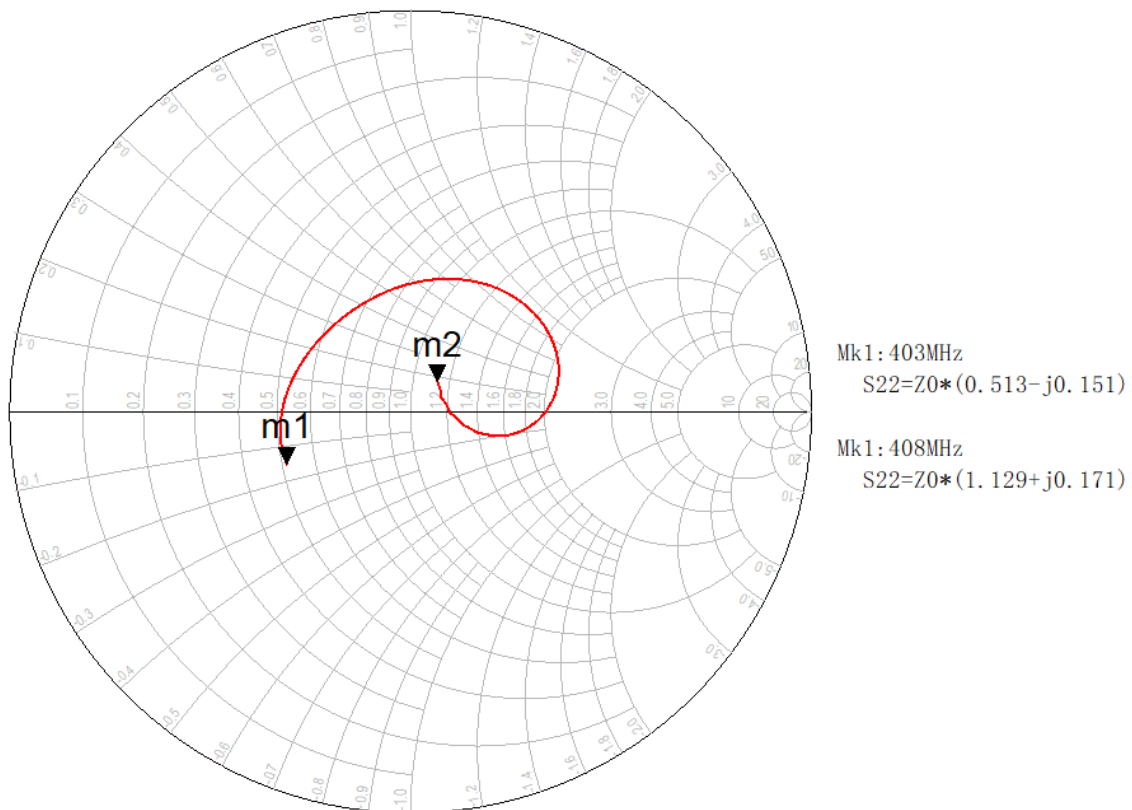
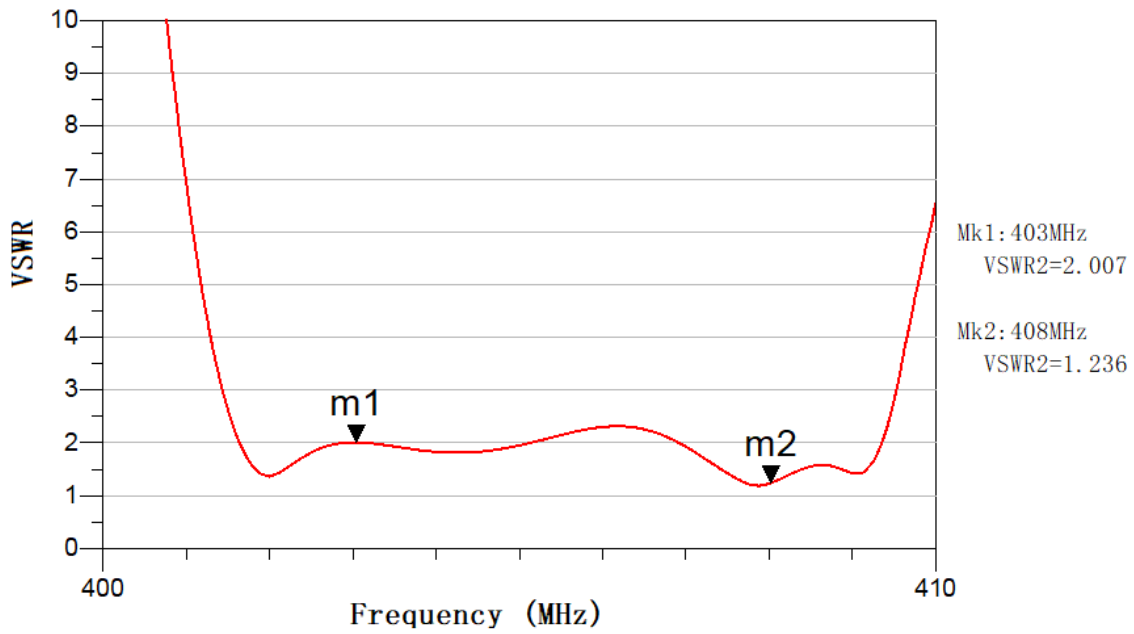
## Reflection coefficients

### Input Port



freq (403.0MHz to 408.0MHz)

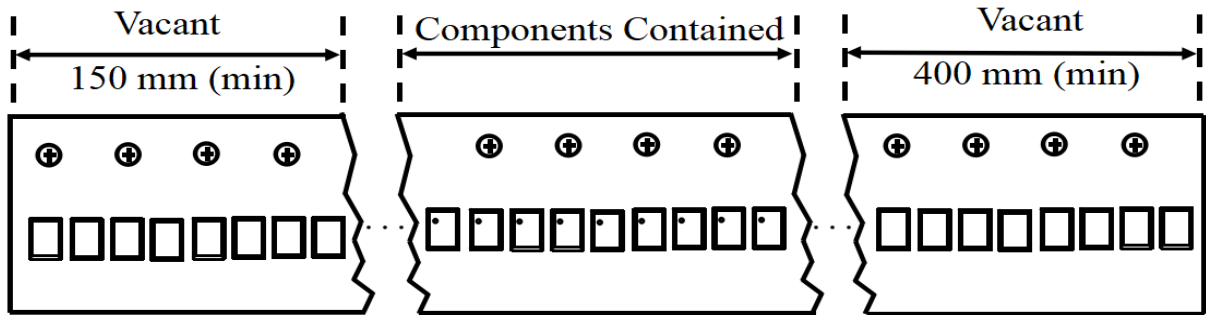
## Output Port



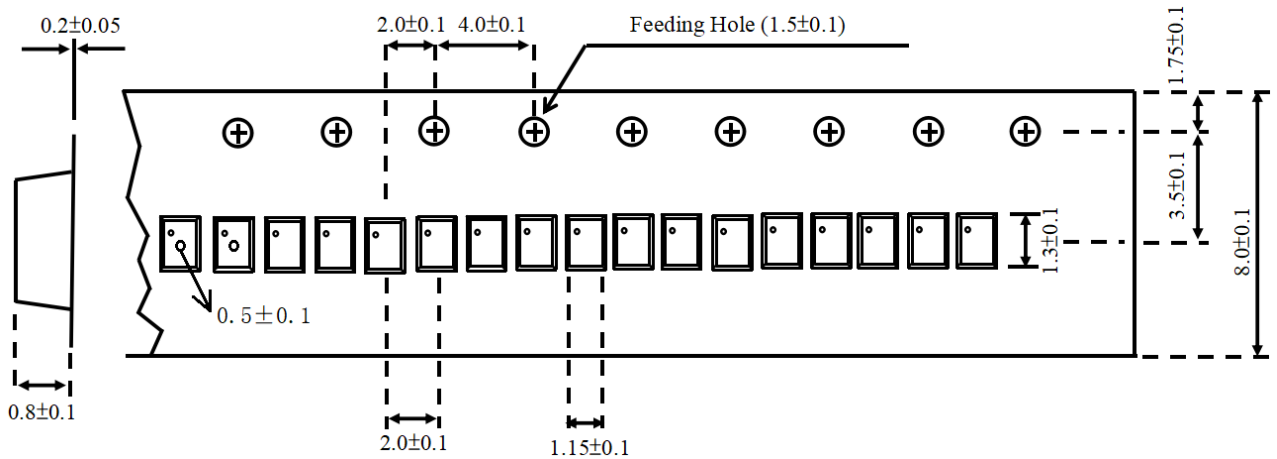
freq (403.0MHz to 408.0MHz)

## Packing

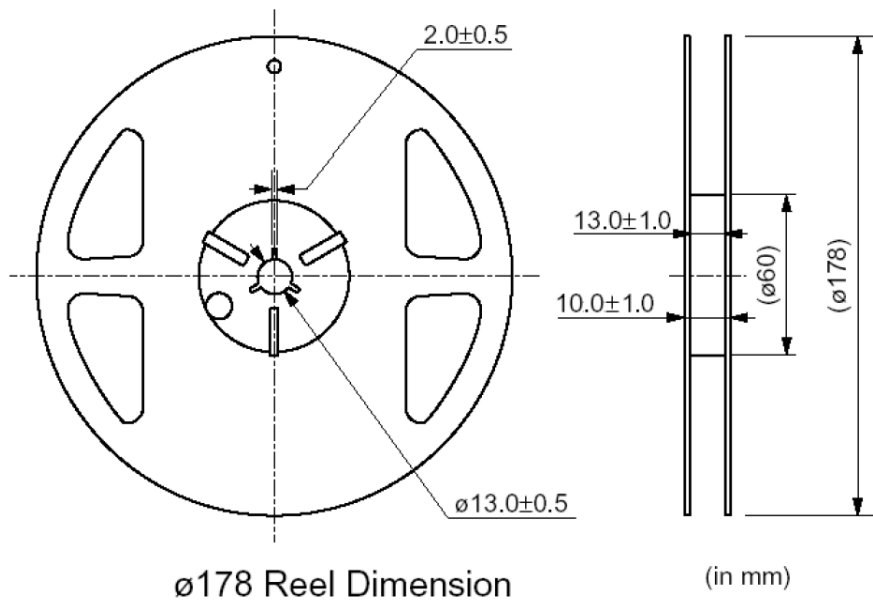
### (1).Leader part and vacant position specifications



### (2).Tape Specifications



10000 pcs/reel  $\phi$  178mm





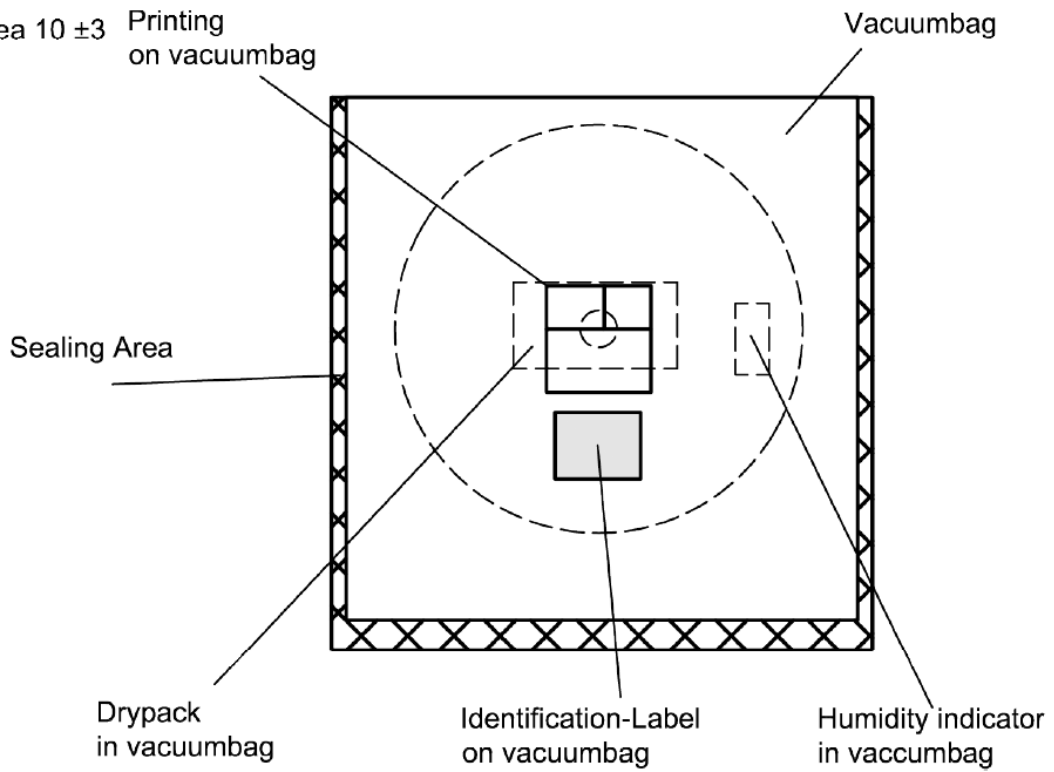
(3).Carton Box

Dimensions [mm]

X = 220+5

Y = 235+5

Sealing area 10 ±3



Drawing of moisture barrier bag (MBB) for reel with diameter of 178 mm

Dimensions [mm]

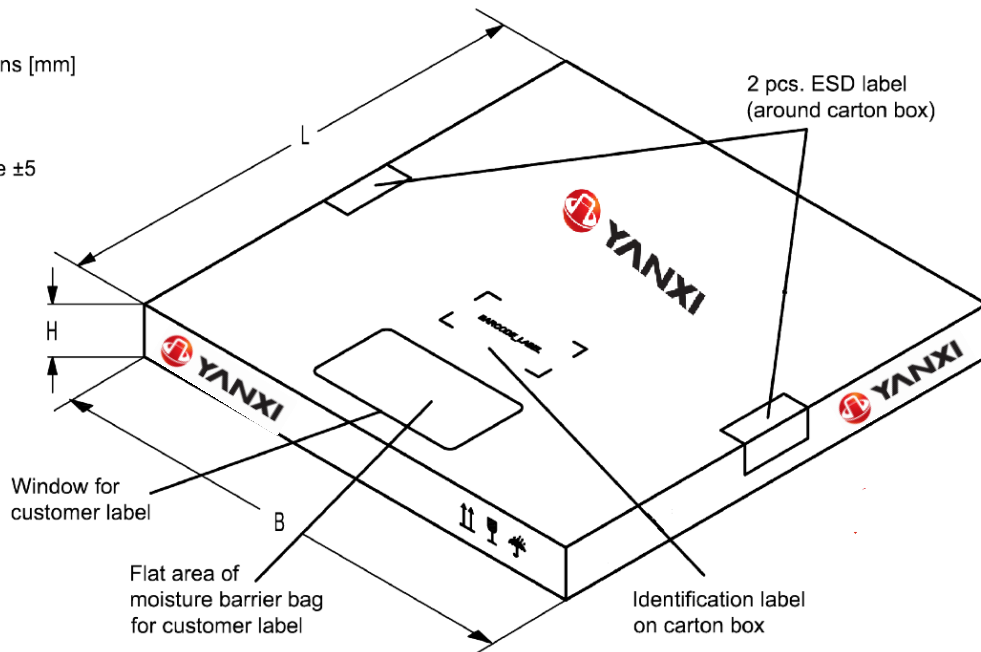
L = 188

B = 188

H = 30

Tolerance ±5

2 pcs. ESD label  
(around carton box)



Drawing of folding box for reel with diameter of 178 mm

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## History Record

Date	Spec.NO.	Part NO.	Modify Content	Remark

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## Contact Information

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