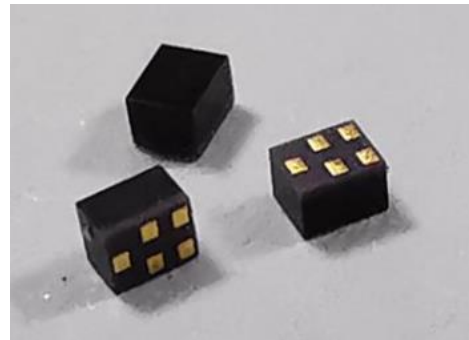


WUHAN YANXI MICRO-COMPONENT CO.,LTD.			
DATE	July. 21. 2020	System	
Part Number	SR813MF5A001	Version 1.0	Original

806MHz-821MHz Filter Standard Specifications



Product Features

- Typical insertion loss in the pass hand 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

- 806-821MHz 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 806-821MHz band.

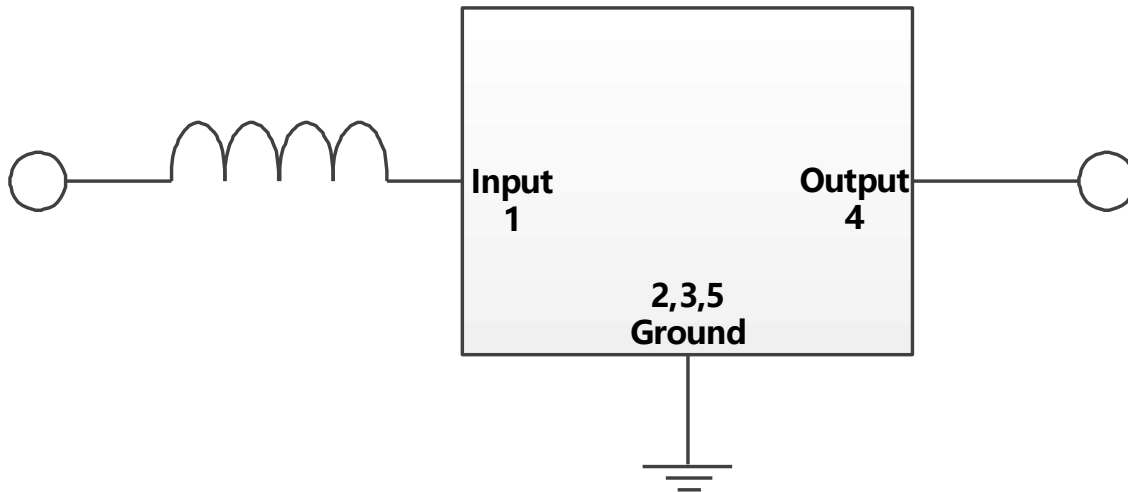
Matching circuit

Input terminating impedance

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

Output terminating impedance

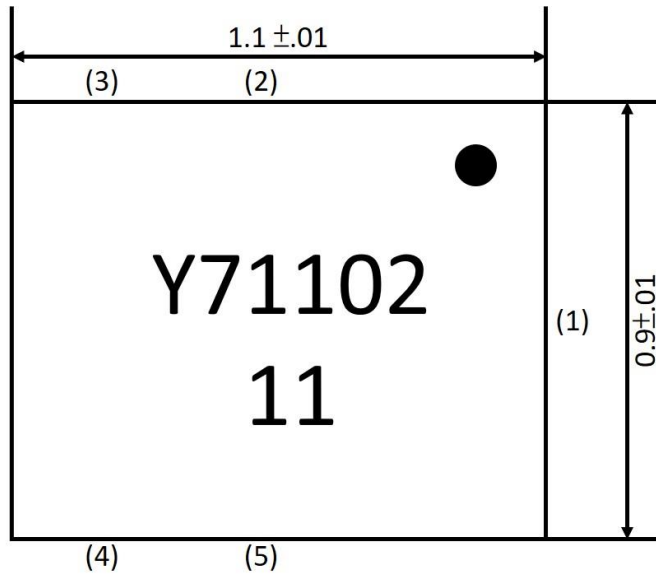
$$Z_{OUT} = 50 \Omega$$



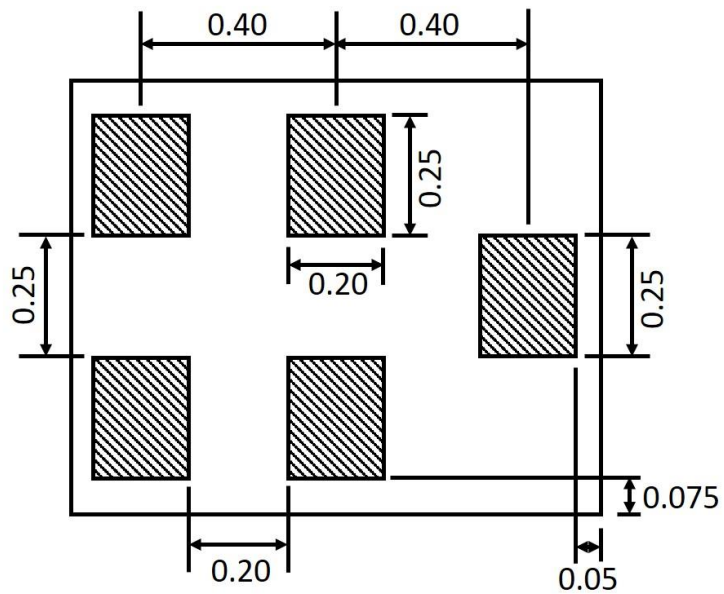
General Description

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

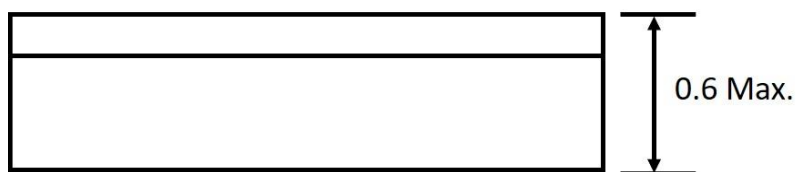
Top View



Bottom View



Side View

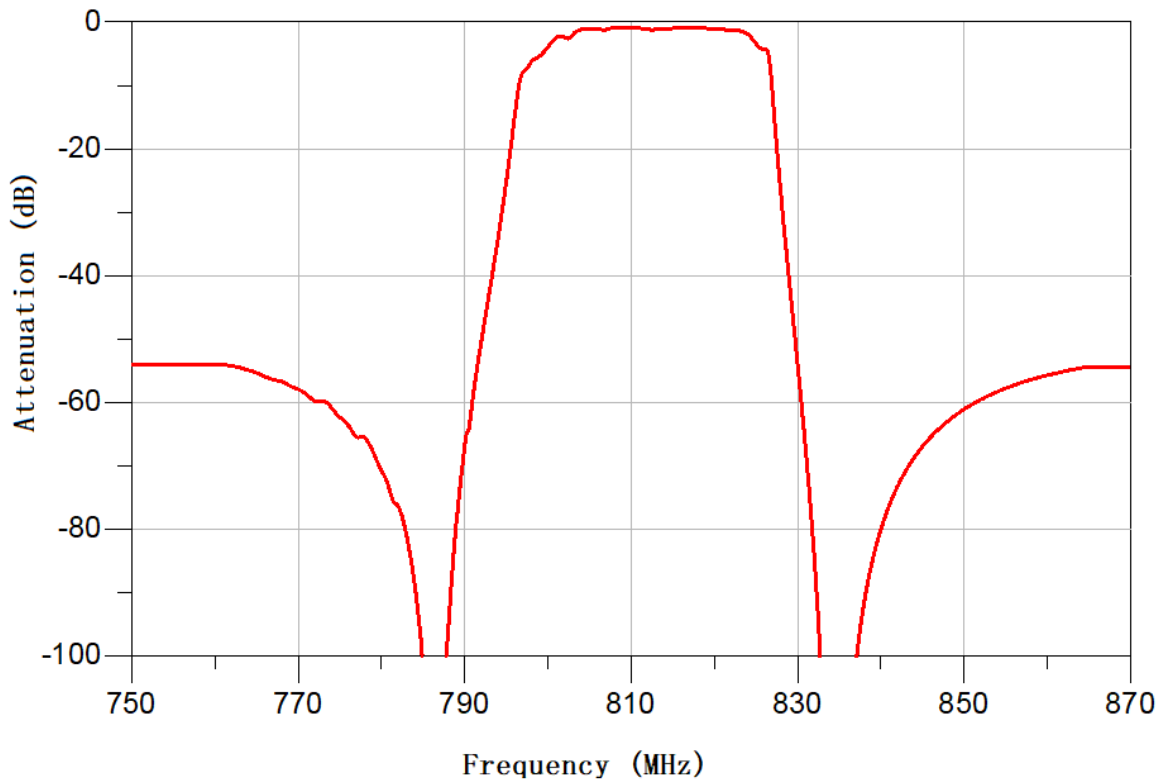
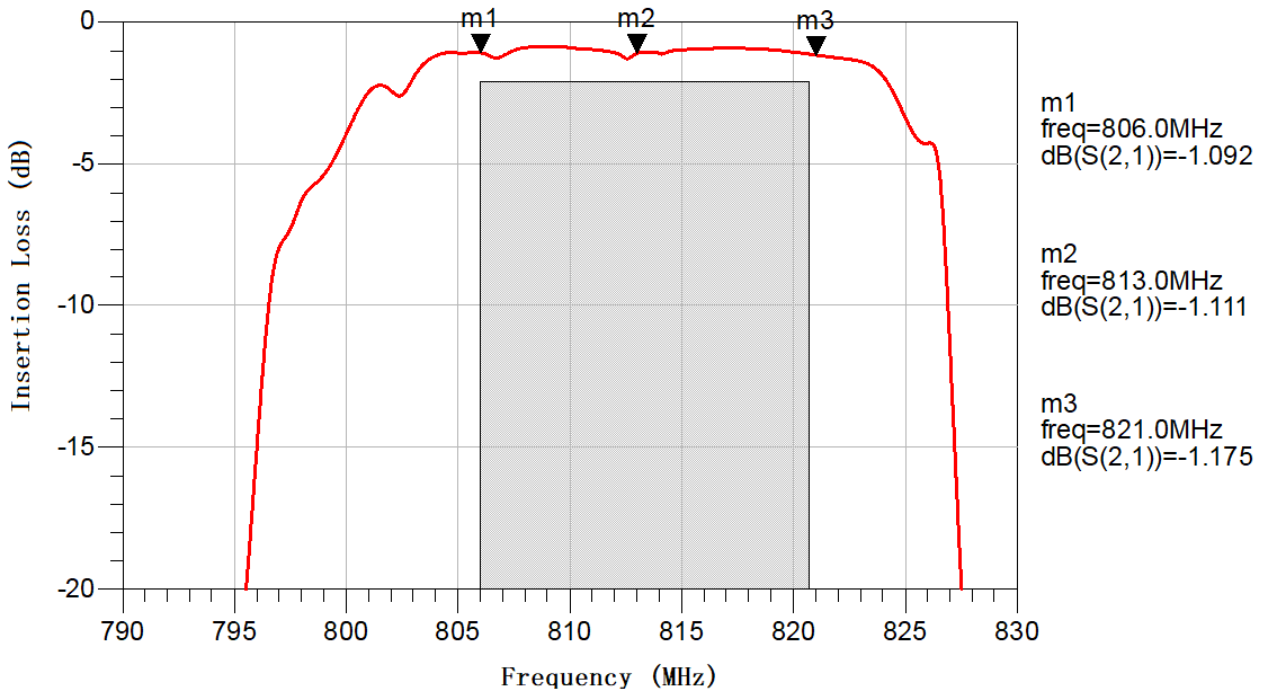


Electrical Specifications

Characteristics	Unit	Min	Typ ⁽¹⁾	Max
Bandpass Filter (806~821 MHz)		@+25° C		
Insertion Loss		dB		
Insertion loss	806~821MHz	-	3.0	3.0 (@-40~+85°C)
Amplitude Ripple	806~821MHz	-	1.0	2.0 (@-40~+85°C)
Input / Output VSWR	806~821MHz	-	-	2.0
Minimum Attenuation		dB		
	0.3~780MHz	45	50	-
	851~870MHz	45	52	-
	960.65~979.65MHz	45	50	-
	1115.3~1134.3MHz	45	50	-
	1269.95~1288.95 MHz	45	50	-
	1612~1650MHz	30	45	-
	1650~2600MHz	30	45	-
Input / Output				
Input / Output Impedance		Ω	50	
Maximum Input Power		dBm	20	-
Operating Conditions				
Operating Temperature		°C	-40°C ~ +85°C	
Relative Humidity		%	10% ~ 90%	
Air Pressure		KPa	86 ~ 106	

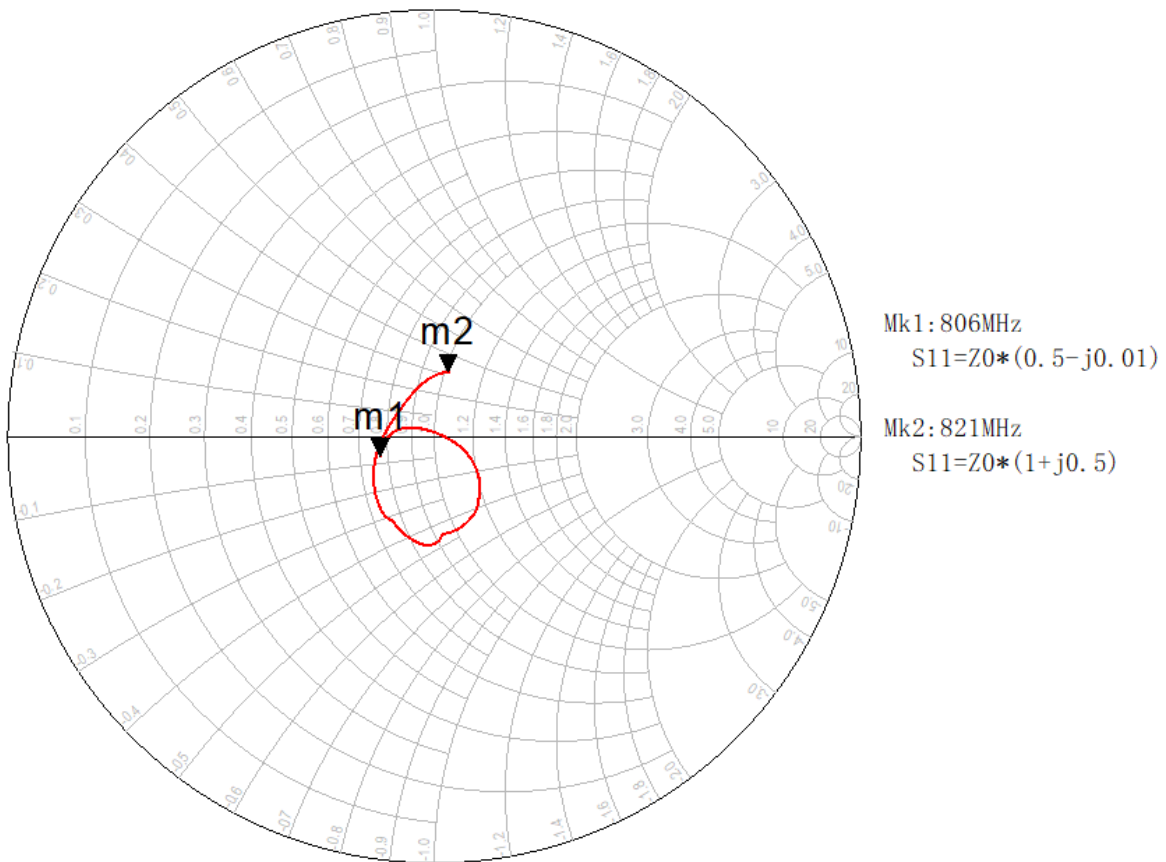
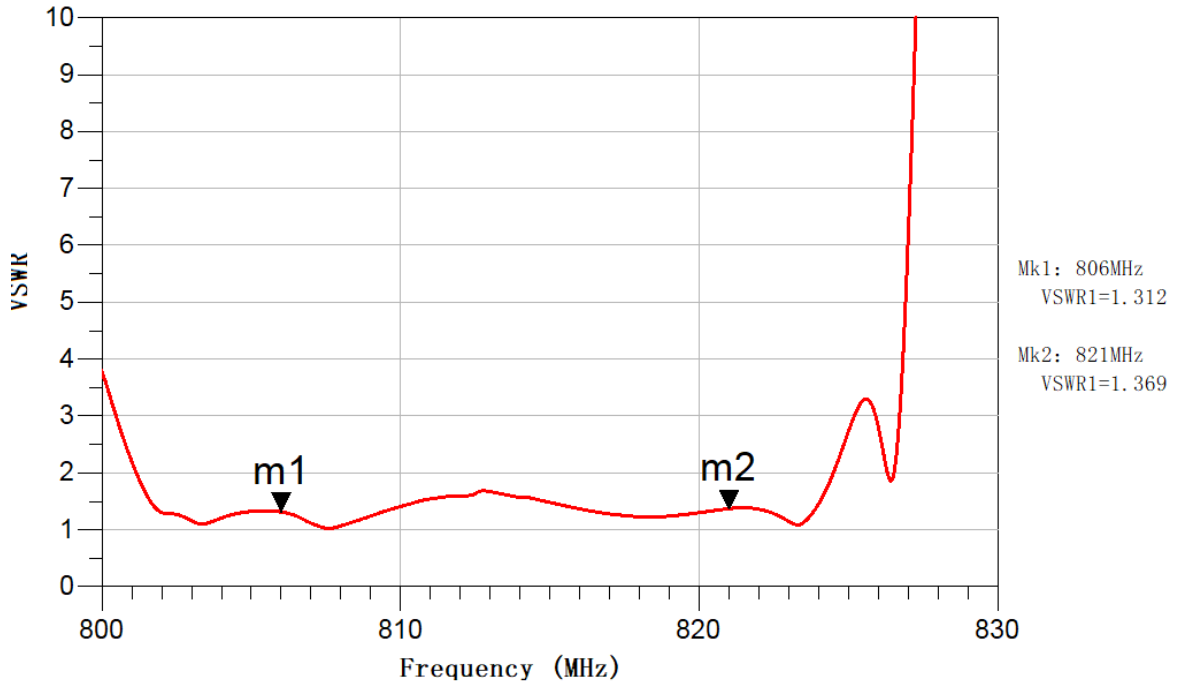
(1) : The typical value is average value of each frequency band.

Transmission coefficient



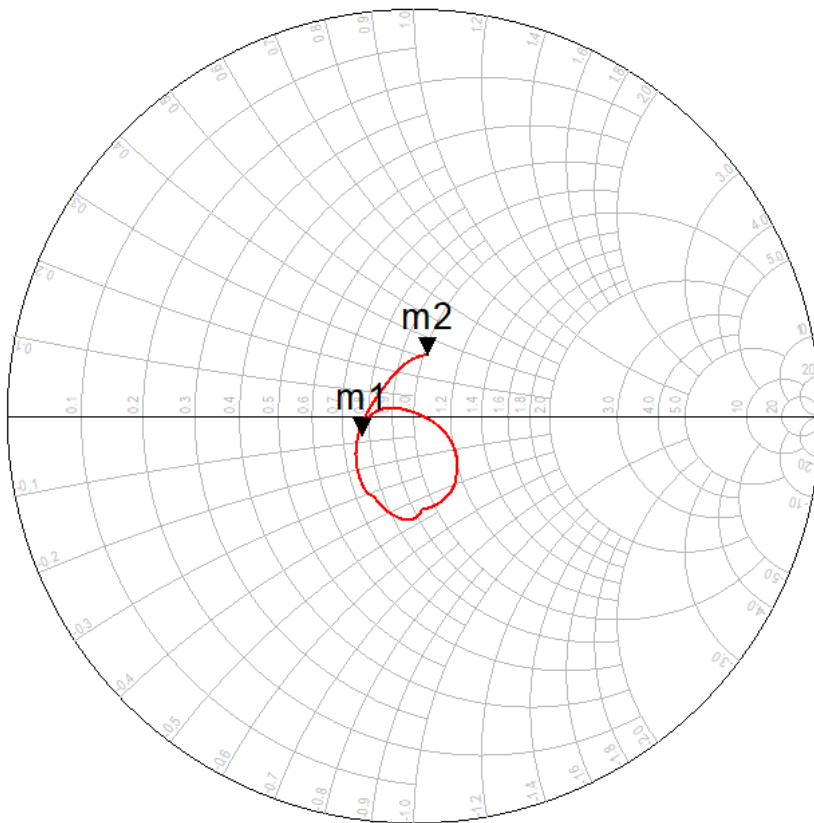
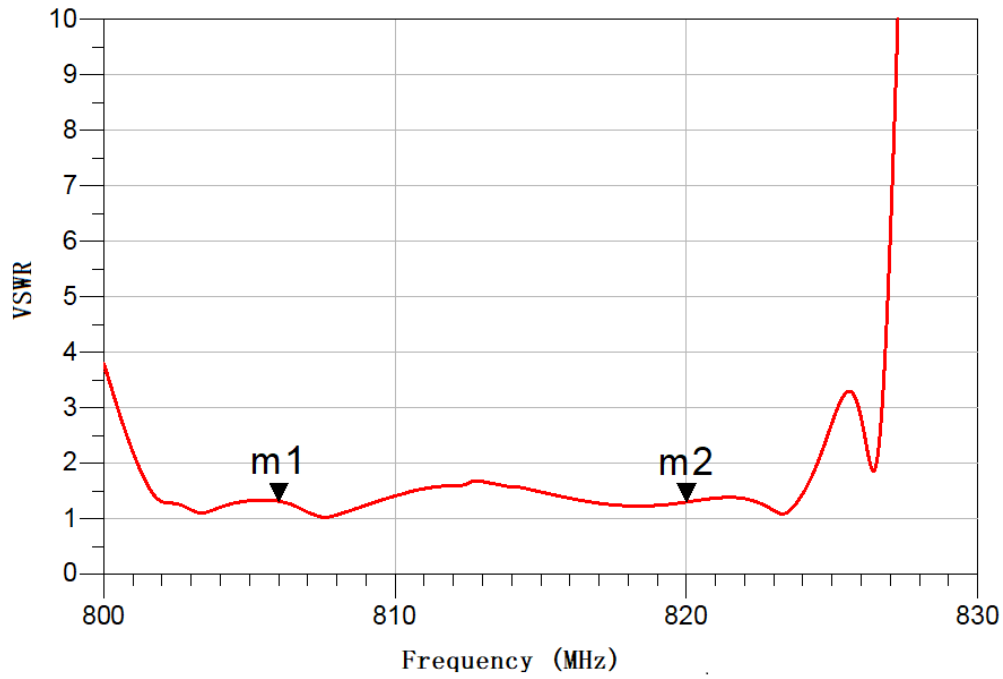
Reflection coefficients

Input Port



freq (806.0MHz to 821.0MHz)

Output Port



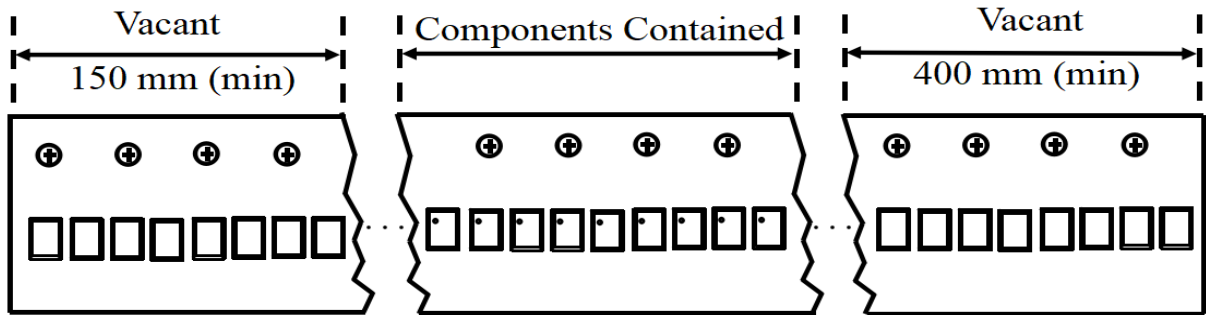
Mk1: 806MHz
 $S_{22} = Z_0 * (0.772 - j0.073)$

Mk1: 821MHz
 $S_{22} = Z_0 * (1.019 + j0.316)$

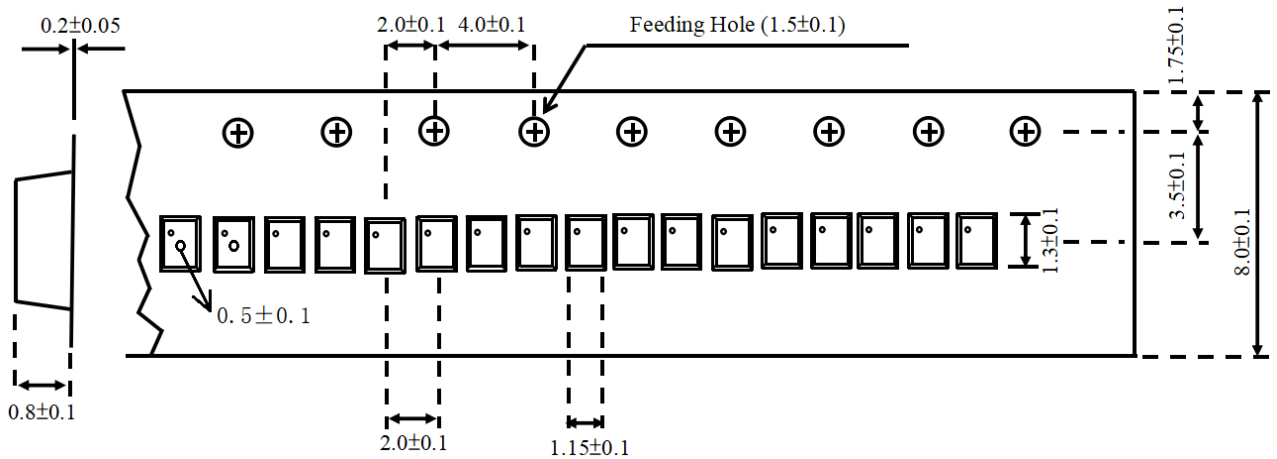
freq (806.0MHz to 821.0MHz)

Packing

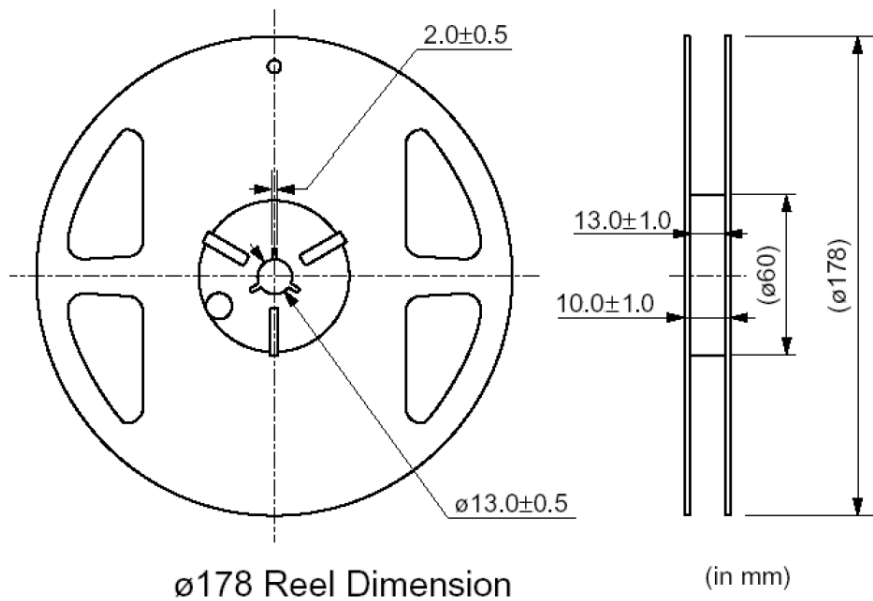
(1).Leader part and vacant position specifications



(2).Tape Specifications



10000 pcs/reel ϕ 178mm



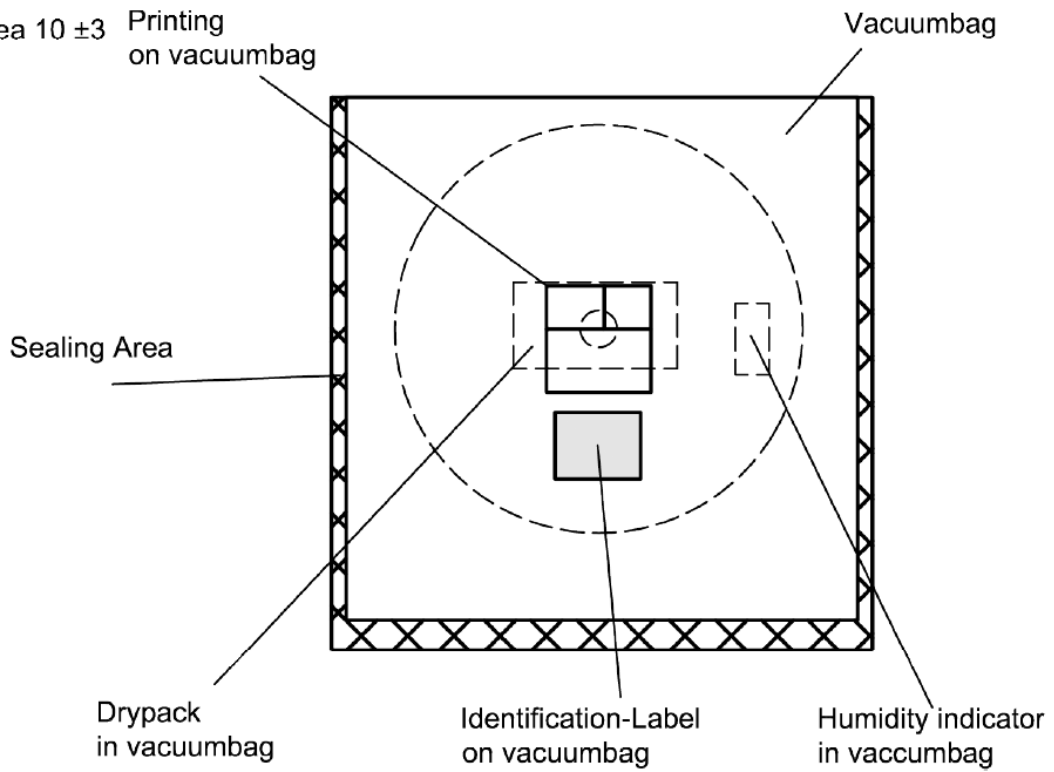
(3).Carton Box

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]

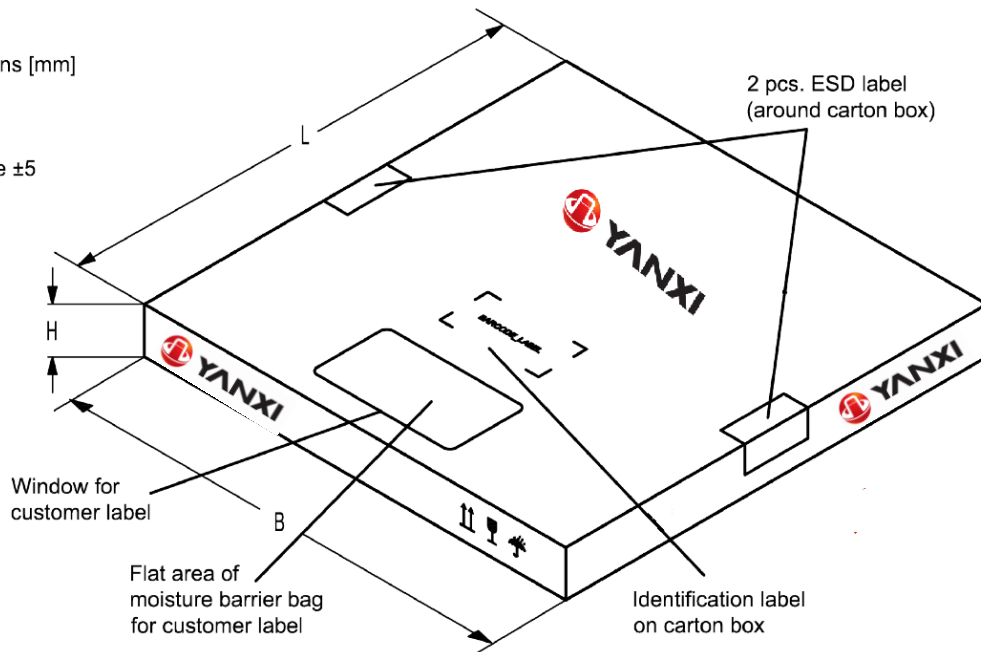
L = 188

B = 188

H = 30

Tolerance ±5

2 pcs. ESD label
(around carton box)



Drawing of folding box for reel with diameter of 178 mm

History Record

Date	Spec.NO.	Part NO.	Modify Content	Remark

Contact Information

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