

### Description

Yantel's surface mounted bandpass filters have the advantages of low insertion loss and return loss, small size, high rejection, good product consistency, etc. The product adopts high-precision innovative manufacturing process, suitable for mass production, competitive cost, and has obvious cost advantages compared with thin film filters.

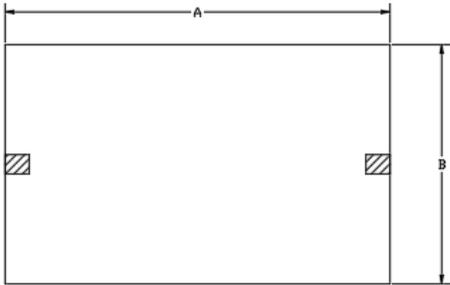
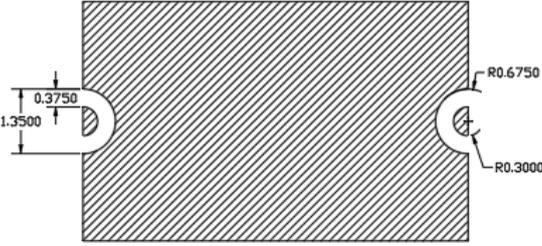
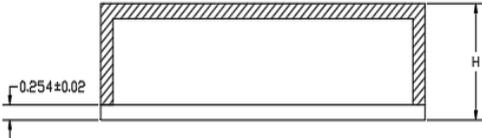
### Features

- Small size
- Low loss, High rejection
- With shielding cover
- SMD Surface mounted
- Humidity level: MSL1
- Working temperature: -55 to +85°C
- Characteristic Impedance: 50Ω
- Tape package
- Competitive price and suitable for large volume use

### Technical Data (Normal temperature +25°C)

No.	Parameter	Min.	Typical	Max.	Unit
1-1	Model No.	SYTFBP9R45/1R1-7UA			
1-2	Size	7.6mm*4.6mm*2.75mm			
1-3	Central Frequency $f_0$		9.45		GHz
1-4	Working Frequency	8.9		10	GHz
1-5	Central Loss		2.5		dB
1-6	Band fluctuation		0.7	1.0	dB
1-7	Return Loss	12	15		dB
1-8	Rejection	@8GHz	40	45	dBc
		@11.5GHz	40	45	
1-9	Power				dBm
1-10	Working temperature	-55		+85	°C
1-11	Storage temperature	-55		+125	°C
1-12	Output installation method	Surface mounted			

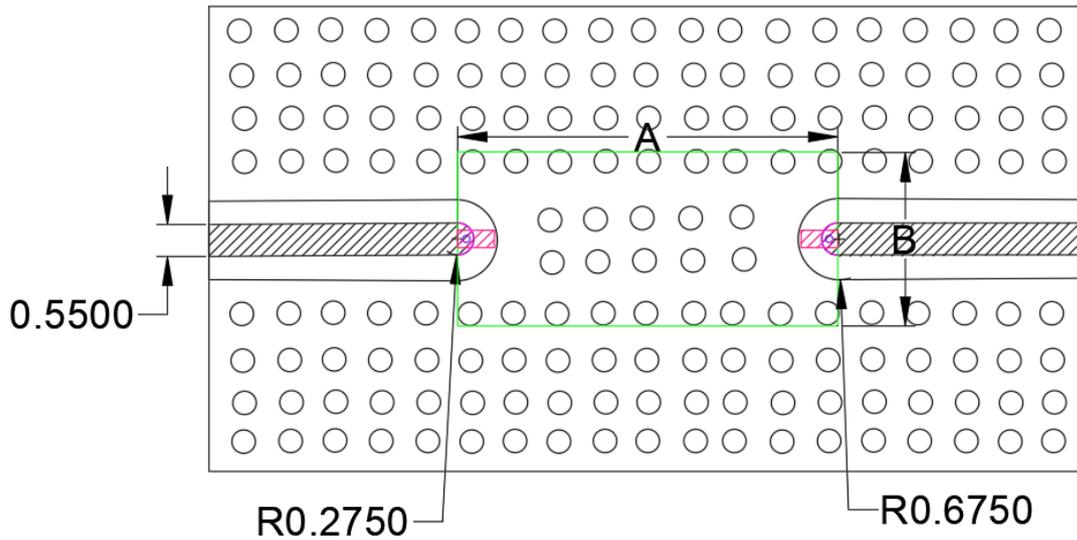
### Dimensions

2-1	Dimension	See below picture (A、B dimension tolerance: $\pm 0.1\text{mm}$ )
Front		
Revers		
		
2-2	Size	A:7.6mm B:4.6mm H:2.75mm (the dimension unit in the drawing is mm, and the shape tolerance of A and B is $\pm 0.1\text{mm}$ )
2-3	Substrate material	Alumina (Er=9.8)
2-4	Surface treatment	Gold plating

### Version status

Version No.	Version date	File status
V2	20250717	✓

## Recommended assembly drawing



## Remark point:

1. Testing Substrate material is Rogers4350B( $\epsilon_r=3.66$ ), thickness is 0.254mm
2. Make sure there is enough solder on the bottom surface of the filter and ensure good grounding.
3. The maximum temperature during assembly is 250°C.

## Simulation Curve:

