

### 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 thick film manufacturing process, suitable for mass production, competitive cost, and has obvious cost advantages compared with thin film filters.

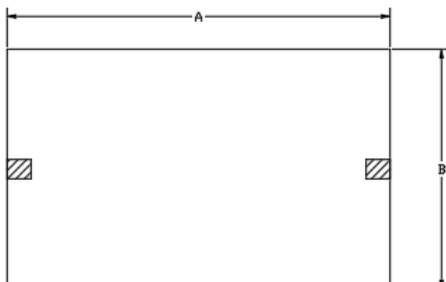

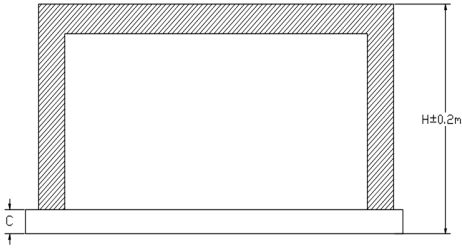
### Features

- 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.	SYTFB081RC0S			
1-2	Size	8mm*5mm*2.5mm			
1-3	Central Frequency $f_0$		8.55		GHz
1-4	Working Frequency	6		11	GHz
1-5	Central Loss		2.5		dB
1-6	Band fluctuation		1	1.5	dB
1-7	Return Loss	12	15		dB
1-8	Rejection	@5.5GHz	18	20	dBc
		@12GHz	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			

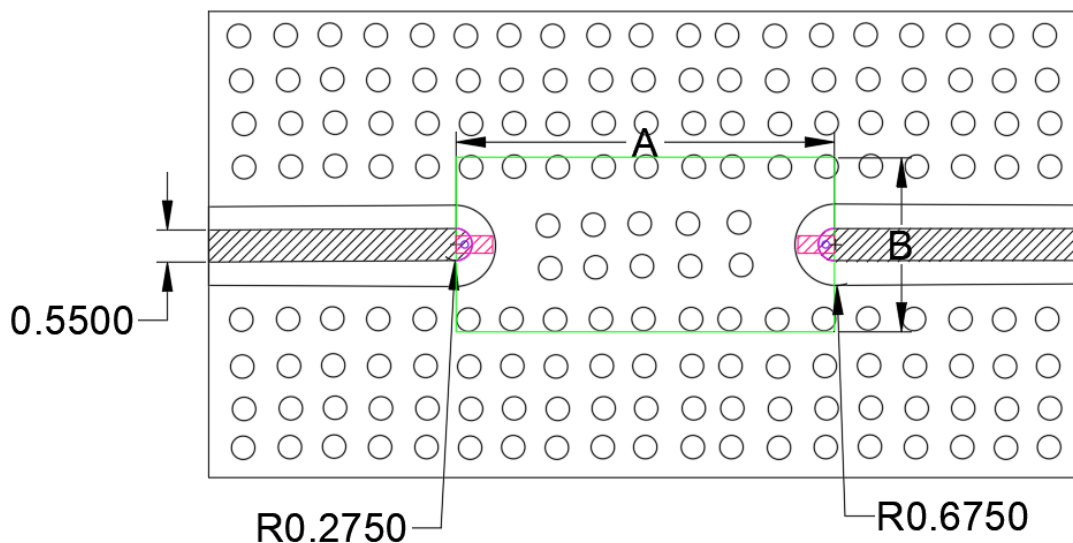
## Dimensions

2-1	Dimension	See belowed picture (A、B dimension tolerance: $\pm 0.1\text{mm}$ )
Front		
Revers		
		
2-2	Size	A: 8.0mm B: 5.0mm C: 0.381mm H:2.5mm (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
V1	20250507	✓

## 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:

