

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.

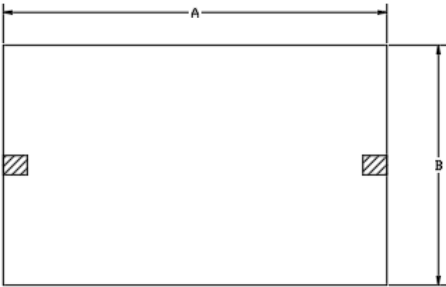
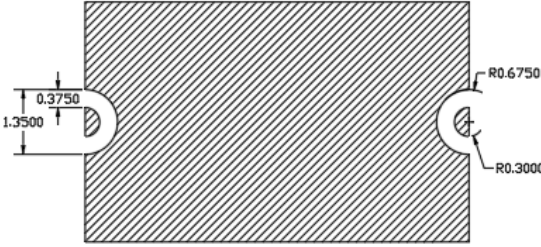
Features

- 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.		SYTFBP6R6/1R2-9ID			
1-2	Size		6.6mm*6.1mm*2.75mm			
1-3	Central Frequency f_0			6.6		GHz
1-4	Working Frequency		6		7.2	GHz
1-5	Central Loss			3.0	3.4	dB
1-6	Band fluctuation			1.2	1.5	dB
1-7	Return Loss		12	15		dB
1-8	Rejection	@1GHz-5GHz	25	40		dBc
		@7.5GHz-9GHz	25	30		dBc
1-9	Power				33	dBm
1-10	Working temperature		-55		+85	°C
1-11	Storage temperature		-55		+125	°C
1-12	Output installation method		Surface mounted			

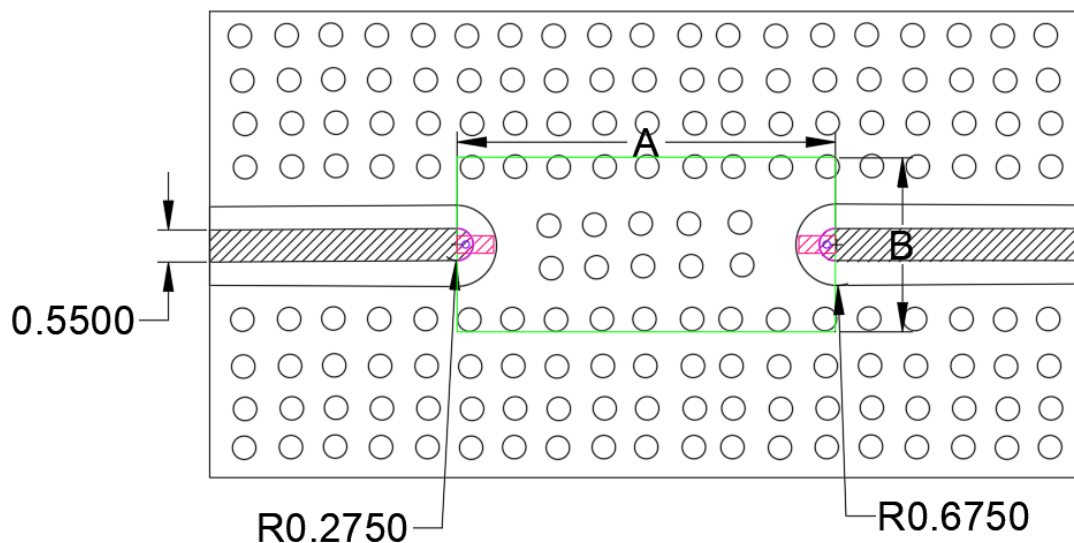
Dimensions

2-1	Dimension	See below picture (A、B dimension tolerance: $\pm 0.1\text{mm}$)
Front		
Reverse		
		
2-2	Size	A: 6.6mm B: 6.1mm 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
V1	20250812	✓

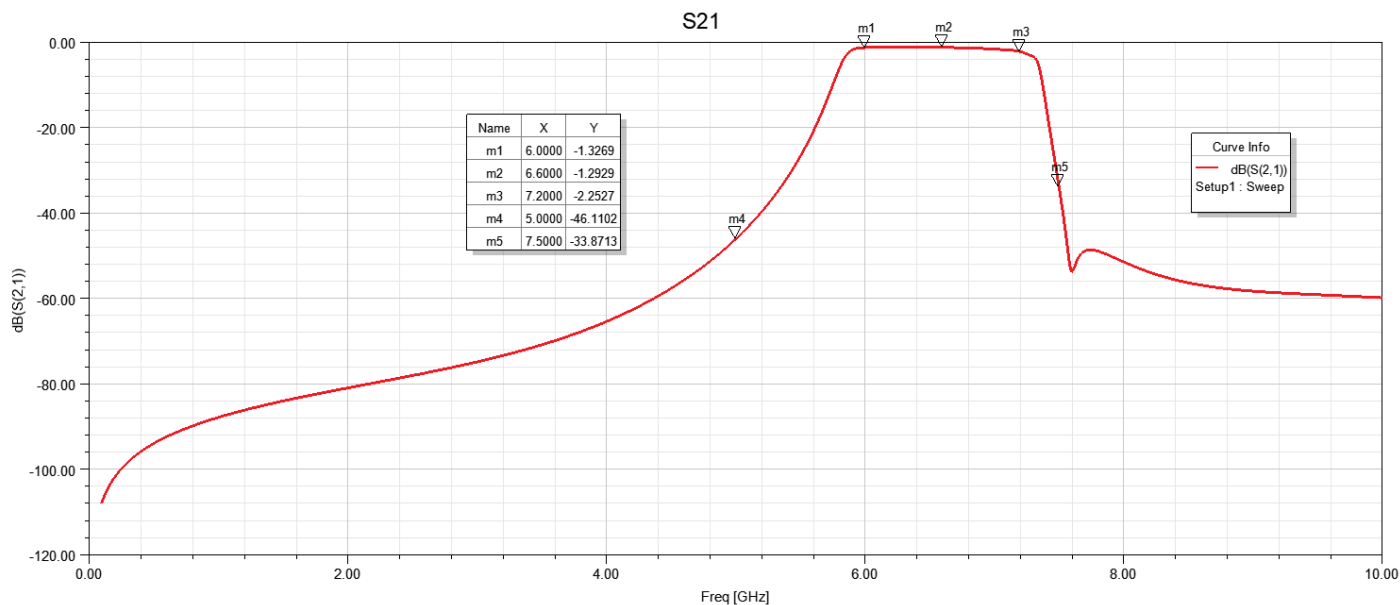
Recommended assembly drawing



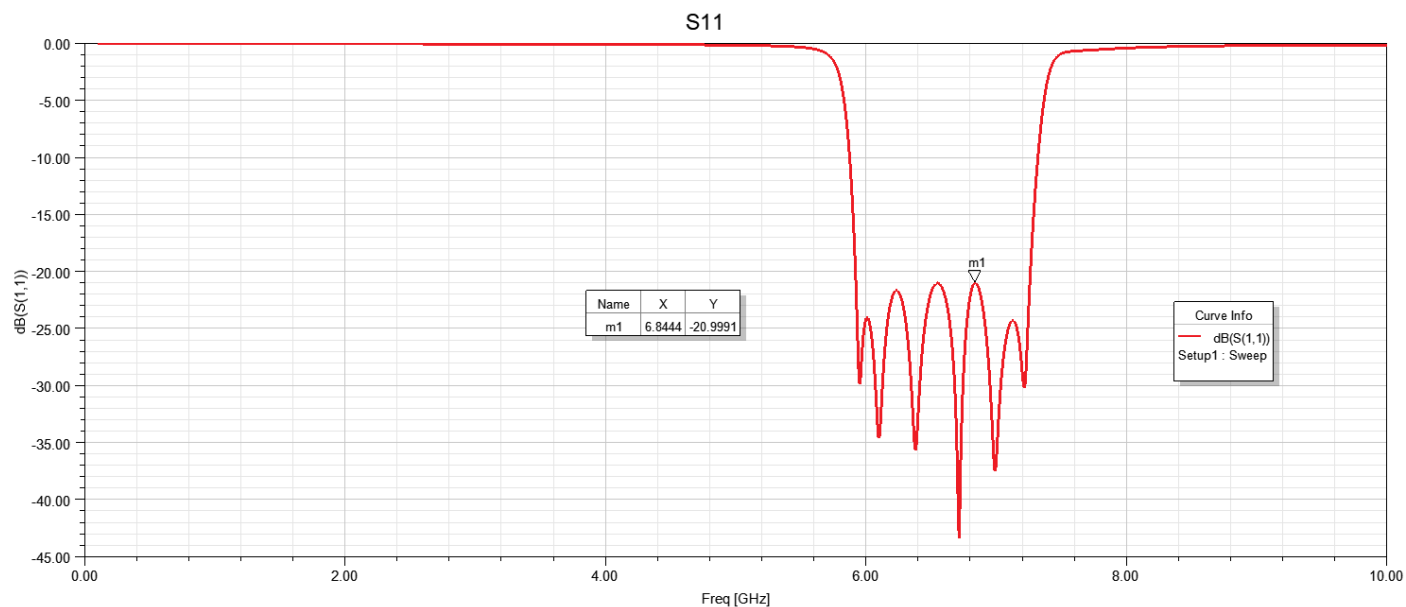
Remark point:

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.

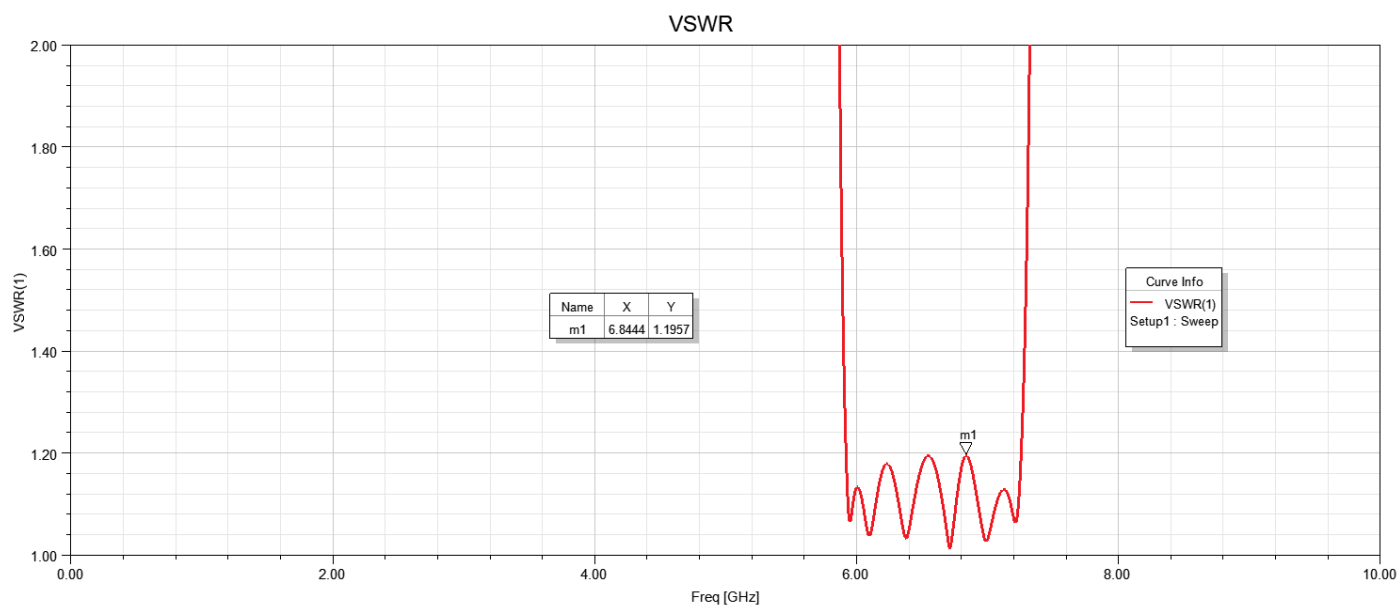
Simulation Curve:



Insertion Loss-S21



Return Loss -S11



VSWR