

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.

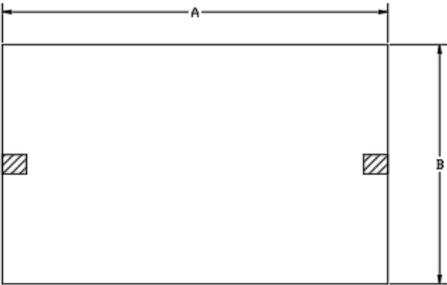
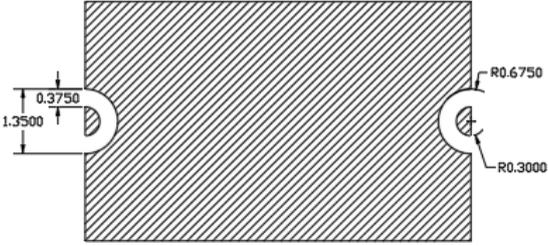
Features

- 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. | SYTFBP6R6/1R5-10ID | | | |
| 1-2 | Size | 6.6mm*6.1mm*2.75mm | | | |
| 1-3 | Central Frequency f_0 | | 6.6 | | GHz |
| 1-4 | Working Frequency | 5.85 | | 7.35 | GHz |
| 1-5 | Central Loss | | 2.5 | 3 | dB |
| 1-6 | Band fluctuation | | 0.8 | 1.0 | dB |
| 1-7 | Return Loss | 12 | 15 | | dB |
| 1-8 | Rejection | @2.9-37GHz | 40 | 45 | dBc |
| | | @15.2-18.2GHz | | 40 | 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 | | | |

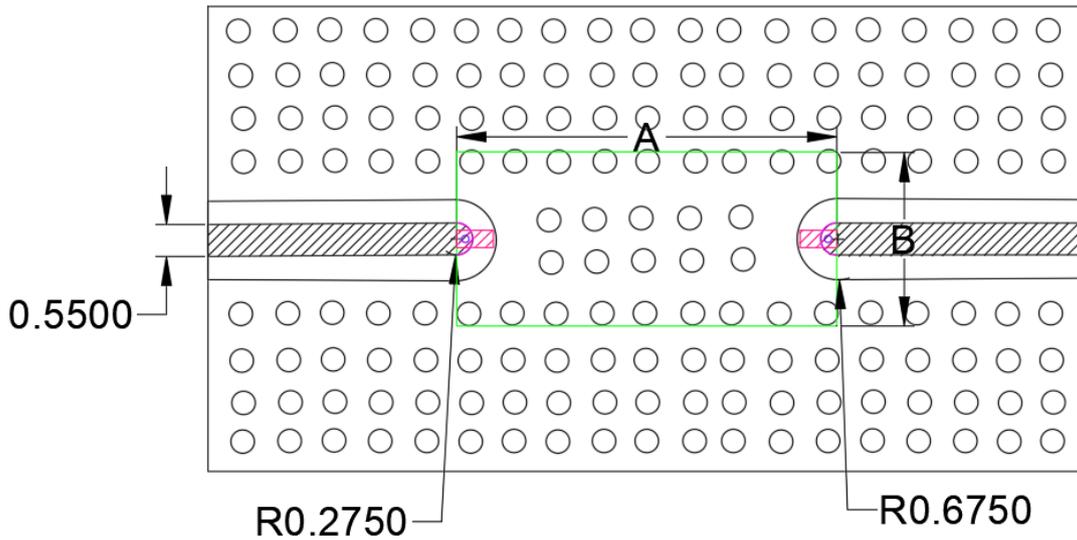
Dimensions

| | | |
|---------|--------------------|--|
| 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 |
|-------------|--------------|-------------|
| V2 | 20250717 | ✓ |

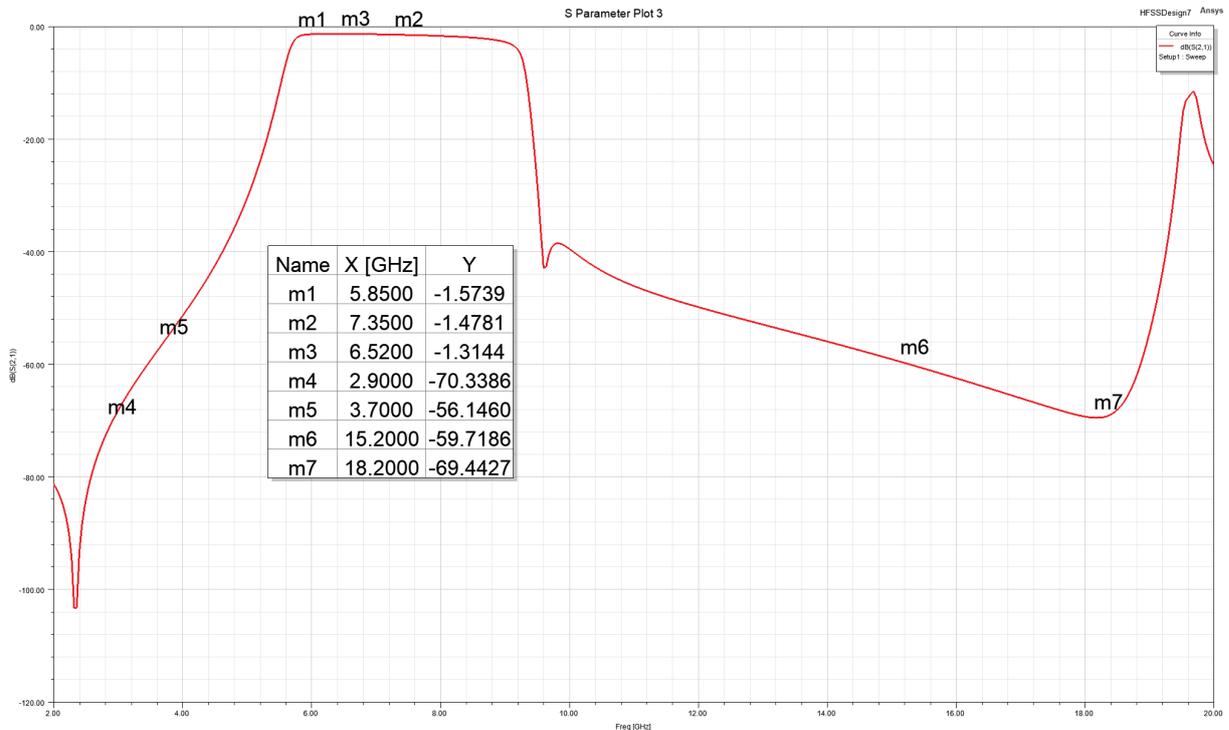
Recommended assembly drawing



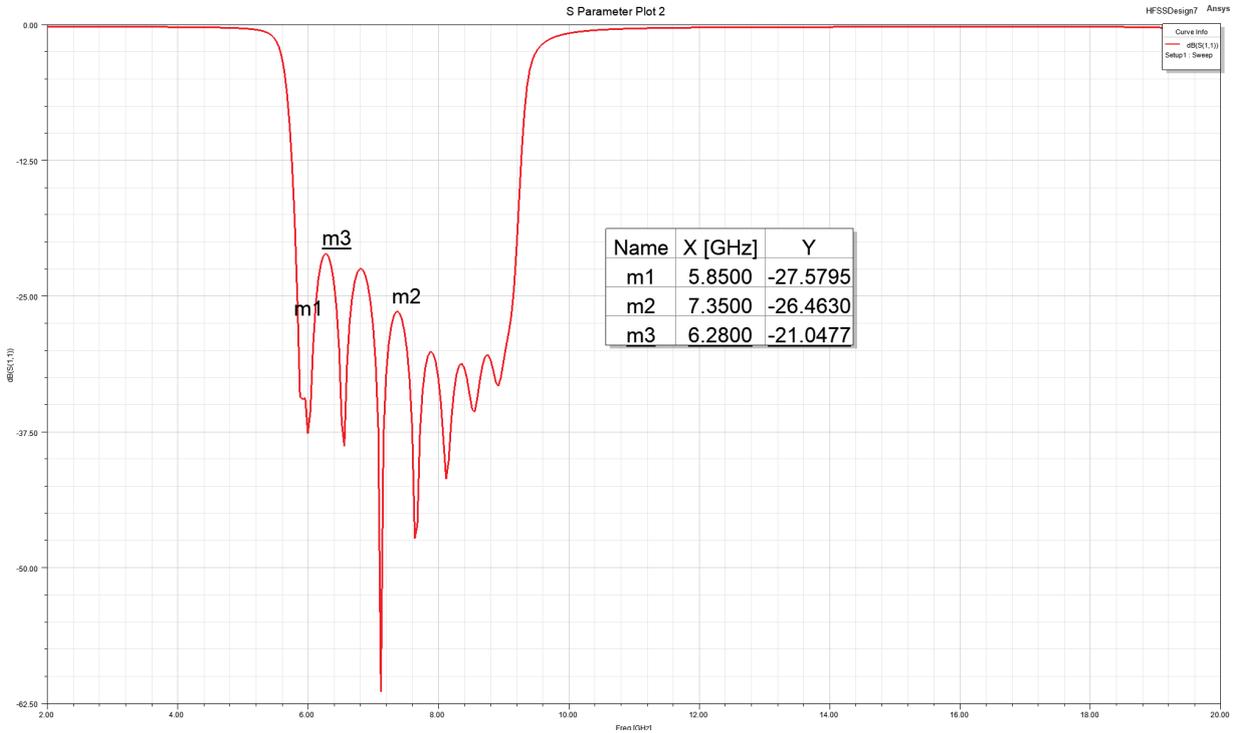
Remark point:

1. Testing Substrate material is Rogers4350B(Er=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.

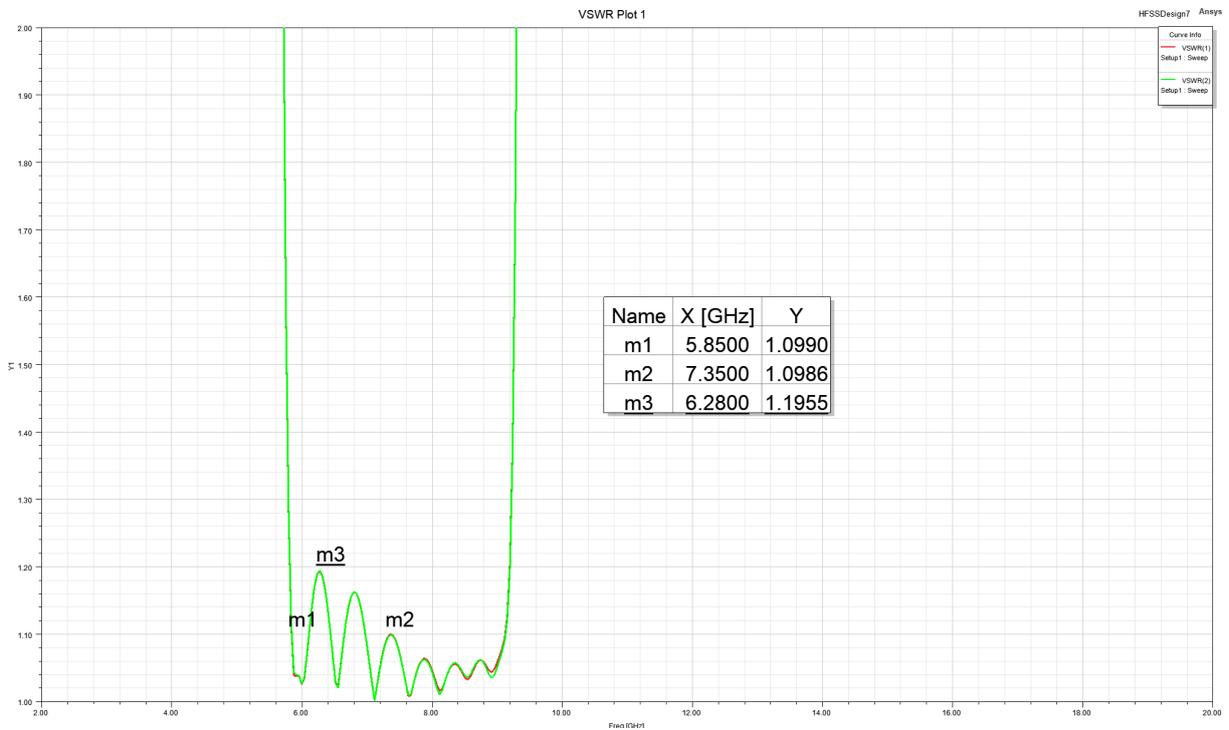
Simulation Curve:



Insertion Loss-S21



Return Loss -S11



VSWR