

## Product features

High precision machining technology

Low temperature drift, high power.

Ceramic substrate, 50  $\Omega$  coplanar waveguide

Gold wire bonding

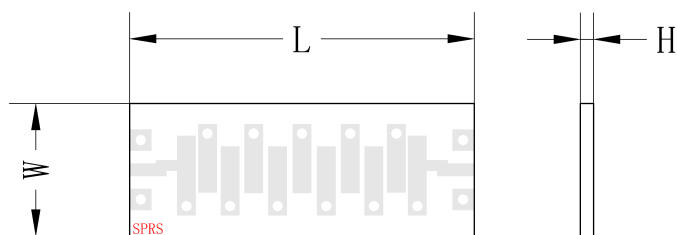
## Tech specifications

| Items              | Parameters     | Units |
|--------------------|----------------|-------|
| Center Frequency   | 8.05           | GHz   |
| Bandwidth          | 7.3-8.8        | GHz   |
| Center loss        | 2.2            | dB    |
| Ripple             | 1.0            | dB    |
| VSWR               | 1.7:1          |       |
| Group delay ripple | 0.5            | ns    |
| Rejection          | 40@DC-6.5GHz   | dBc   |
| Rejection          | 35@9.6-17.0GHz | dBc   |

## Other requirement (Design assurance)

|                 |                         |
|-----------------|-------------------------|
| power           | 2W CW                   |
| Operation Temp. | -55~+85°C               |
| Storage Temp.   | -55~+125°C              |
| Outline size    | L: 7.0, W: 4.5, h: 0.26 |

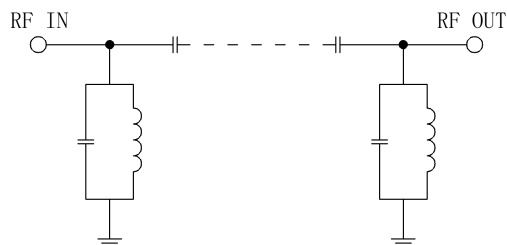
## Outline drawing: Port centered



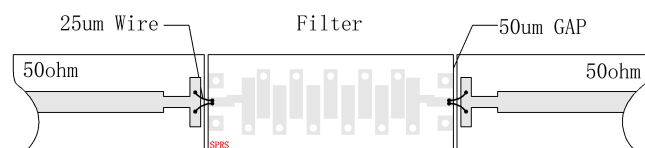
## 参考图

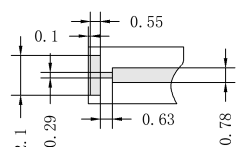
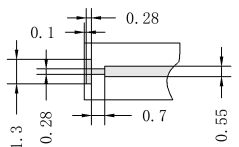


## Schematic diagram



## Suggested PCB Layout



| PCB Rogers5880, h: 0.254mm                                                        | PCB Rogers4350B, h: 0.254mm                                                       |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |

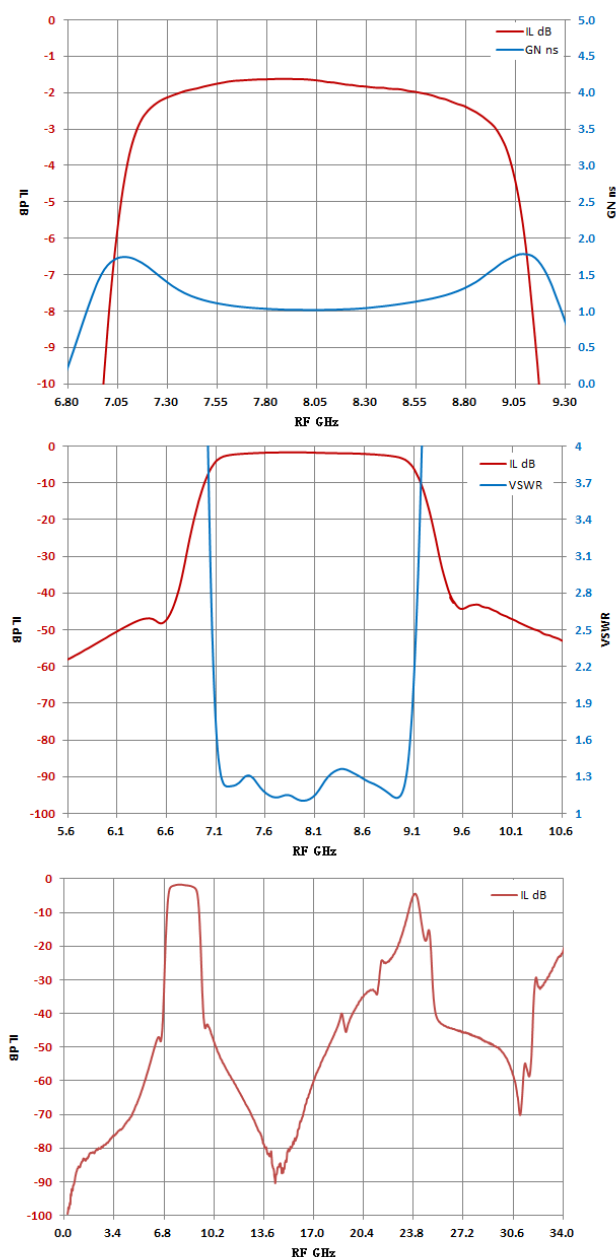
## Note

- 1: The chip is recommended to be used in separate chambers, with one side 0.1mm away from the side wall and the surface 1.74mm away from the top cover. The ports are interchangeable;
- 2: Suggest using conductive adhesive for bonding;
- 3: The chip should be installed on materials such as Kovar (recommended) or copper with a thermal expansion coefficient similar to that of ceramics (6.7ppm/C), and the carrier thickness should be  $\geq 0.2\text{mm}$ ;
- 4: Suggest using a T-shaped structure for microstrip bonding.
- 5: 由于加工精度误差个别产品会有调试胶补偿;

## Thin film filter STBP8R1-1R5-N464

Bandwidth 7.3-8.8GHz, Rejection 40@DC-6.5GHz, 35@9.6-17.0GHz

## Typical test curve



Note: The specifications and performance data contained in this data sheet are based on tests established by CMW.