

### Description

Yantel's surface mount catalog bandpass filters utilize Yantel's low loss temperature stable materials which offer small size and minimal performance variation over temperature. The catalog BPF's are offered in a variety of frequency bands, which offers a drop in solution with highly repeatable performance.

### Features

- Small Size
- Fully Shielded Component
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

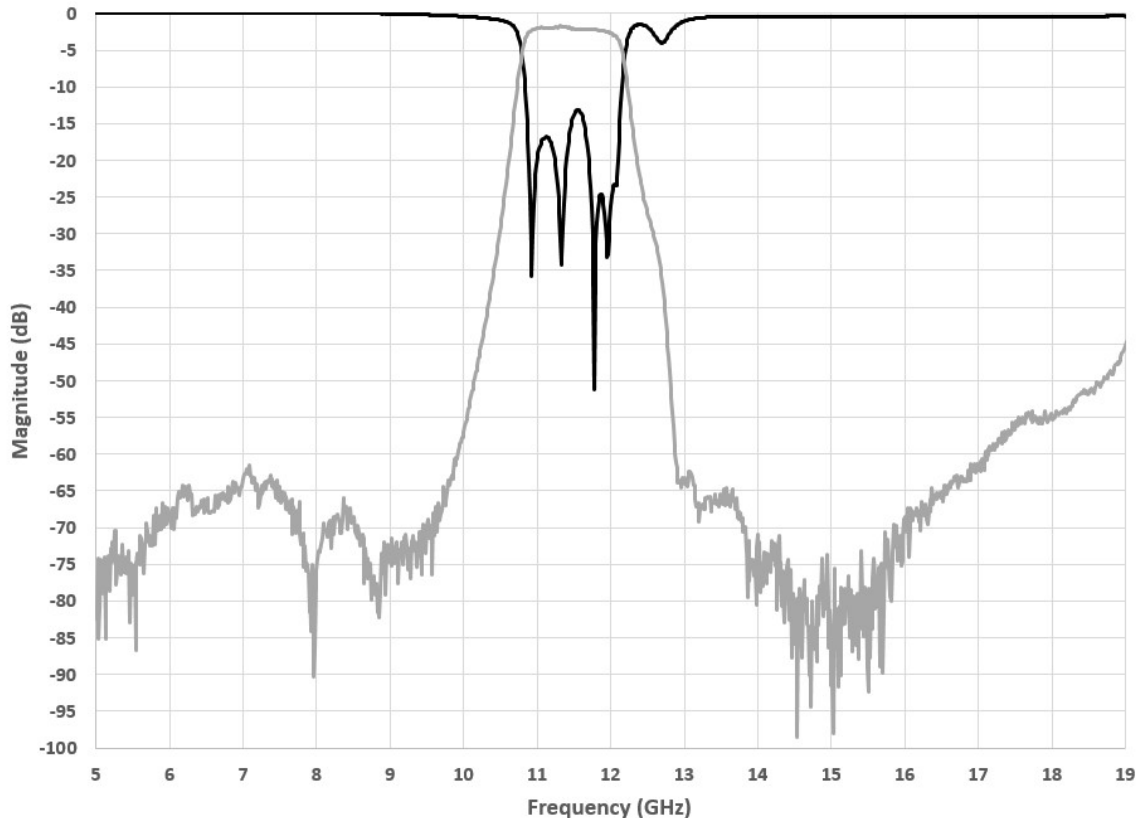
### Specifications\*

| Parameter  | Frequency Range (GHz)                              | Min | Typ. | Max  |
|--|--|-----|------|------|
| Insertion Loss (dB)                              | 10.86 -12.0  |     | 3.0  | 3.75 |
| Return Loss (dB)                                 |  | 10  | 15   | 12   |
| Low Side Rejection (dB)                          | DC - 10  | 40  | 45   |      |
| High Side Rejection (dB)                         | 12.9 - 19.0  | 40  | 45   |      |
| CW Input Power** (W)                             |  |     |      | 5    |
| $\theta_{jc} \left( \frac{^{\circ}C}{W} \right)$ | 15   |     |      |      |
| Size (L x W x H)                                 | 0.400 x 0.200 x 0.093 in<br>10.16 x 5.08 x 2.37 mm |     |      |      |

\*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary  $\pm 0.5$ dB over temperature.

\*\*Power rating assumes the component will be mounted to a PCB with good thermally conducting ground vias as outlined in the recommended PCB layout that are connected to an adequate heat sink. Max power is based on 125°C base temperature.

### Typical Measured Performance



\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.00hm CPW ground traces going into the ports at room temperature.

### Yantel Corporation

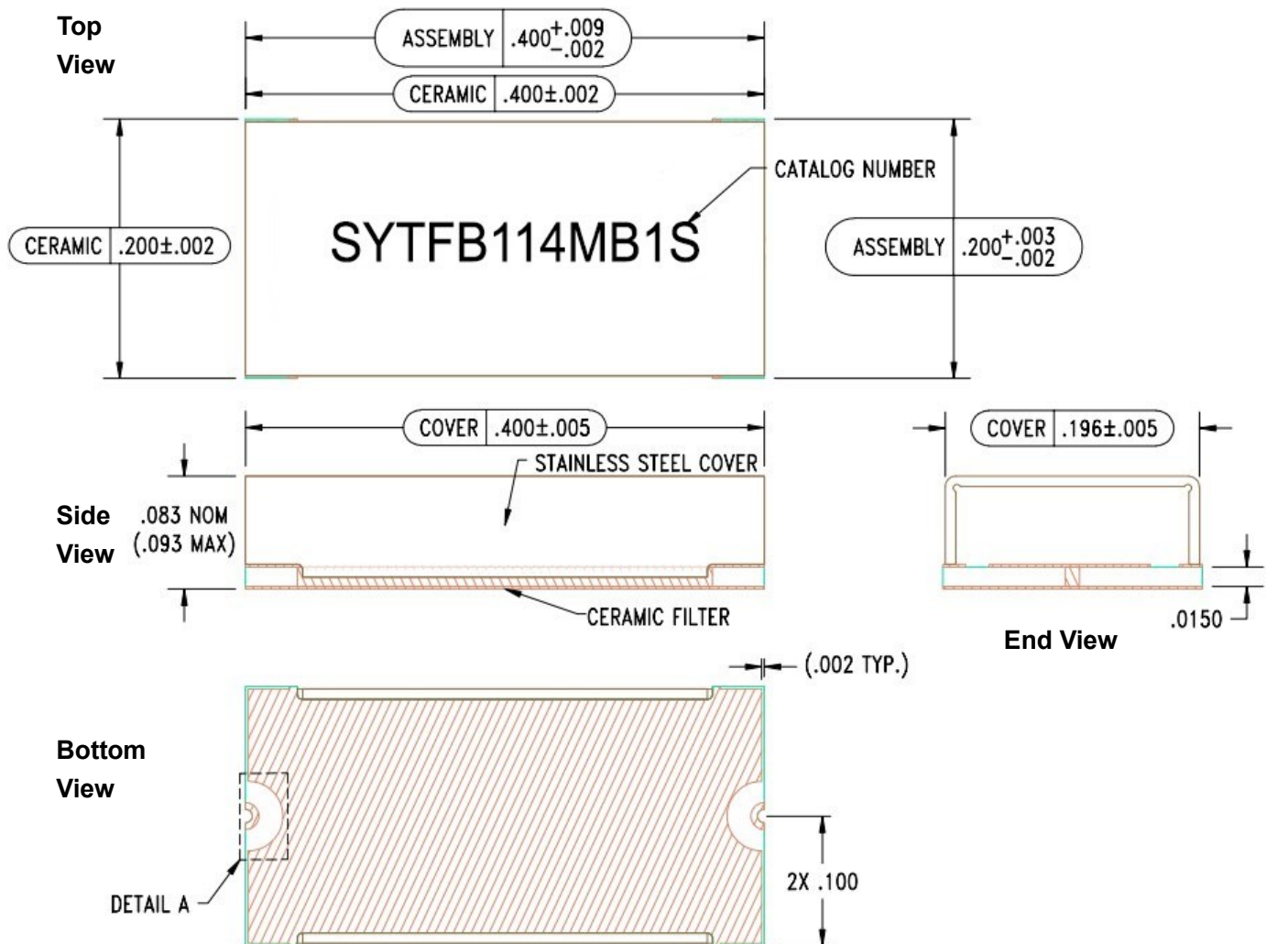
Add: No.308-322,3F, Building 1, Juchuang Jingu Innovation Park, Wenyuan Road 35, Xili Street, Nanshan, Shenzhen, China

Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

## Physical Dimensions

Units = inches

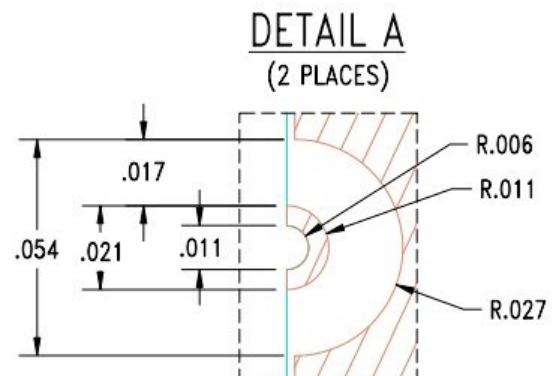


### Notes :

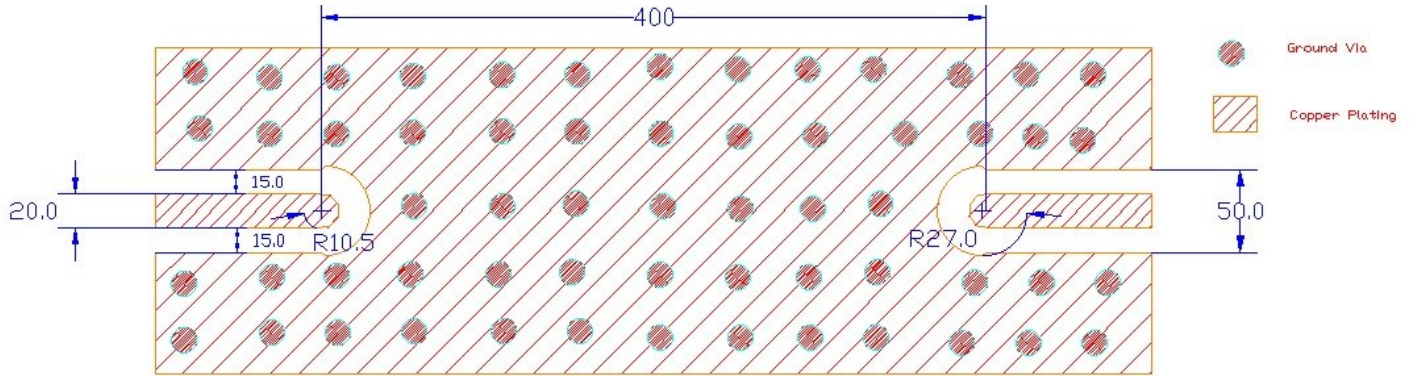
- Termination Finish:  
ENIG: 3 - 6  $\mu\text{inch}$  Au over 50  $\mu\text{inch}$  Ni
- Maximum Assembly Process Temperature: 250°C

### Tolerances:

- For values with 3 decimal places  $\pm 0.001$
- For values with 4 decimal places  $\pm 0.0005$



### Recommended PCB Layout



Unit =mils

**Note:**

- 50Ω trace dimensions are application specific.
- 50Ω trace dimensions are designed for 10mil thick R04350B Rogers Board.
- Ensure adequate grounding beneath the part.