

### 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

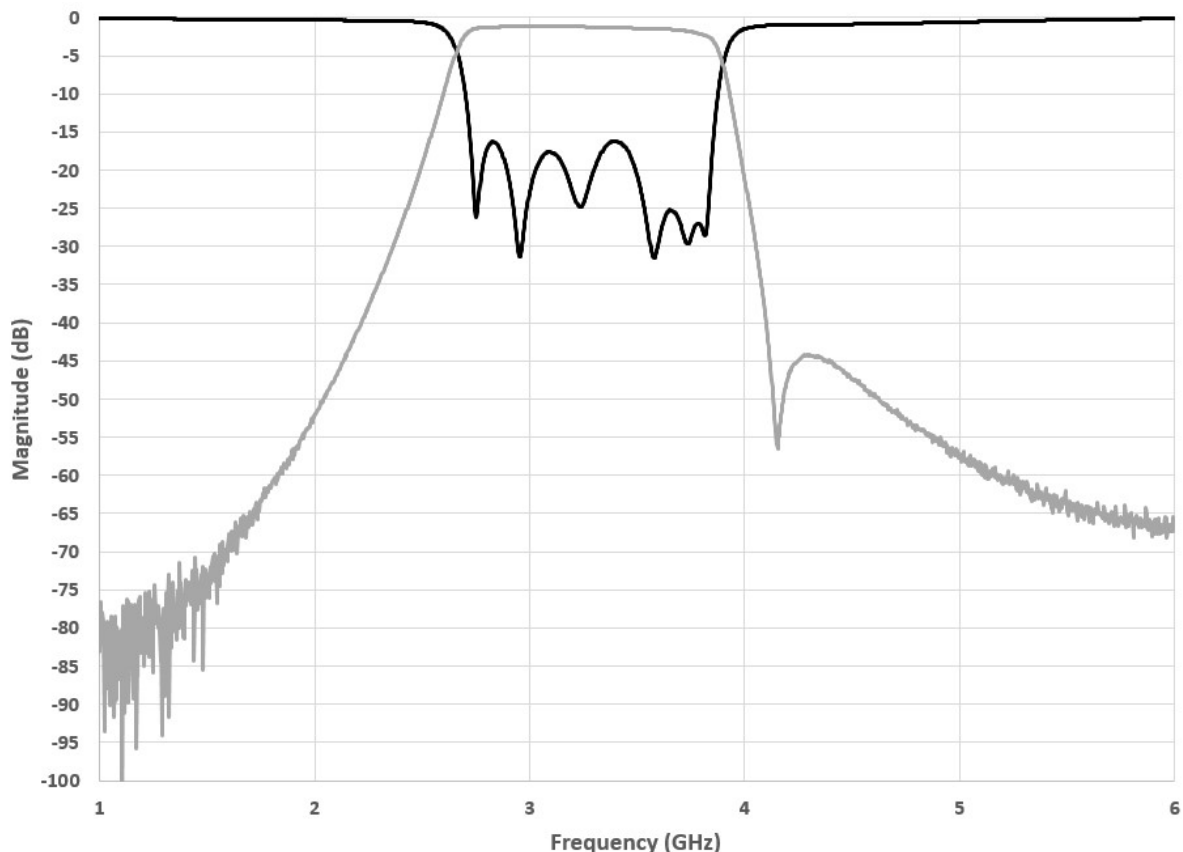
### Specifications\*

| Parameter  | Frequency Range (GHz) | Min  | Typ. | Max  |
|--|-----------------------|------|------|------|
| Insertion Loss (dB)  | 2.75 - 3.75           |      | 2.2  | 3.0  |
| Return Loss (dB)   |                       | 10.0 | 15.0 | 12.0 |
| Low Side Rejection (dB)  | DC – 1.875            | 40.0 | 45.0 |      |
| High Side Rejection (dB)                                       | 4.125 - 6.0           | 40.0 | 45.0 |      |
| CW Input Power** (W)   |                       |      |      | 10   |
| $\theta_{jc} \left( \frac{^{\circ}\text{C}}{\text{W}} \right)$ | 7.5                   |      |      |      |
| Size (L x W x H)   | 9.14 x 6.60 x 2.50 mm |      |      |      |

\*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary  $\pm 0.5\text{dB}$  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 DEB (0.254mm RO4350B with 50Ω CPW ground traces), tested at room temperature.

### Yantel Corporation

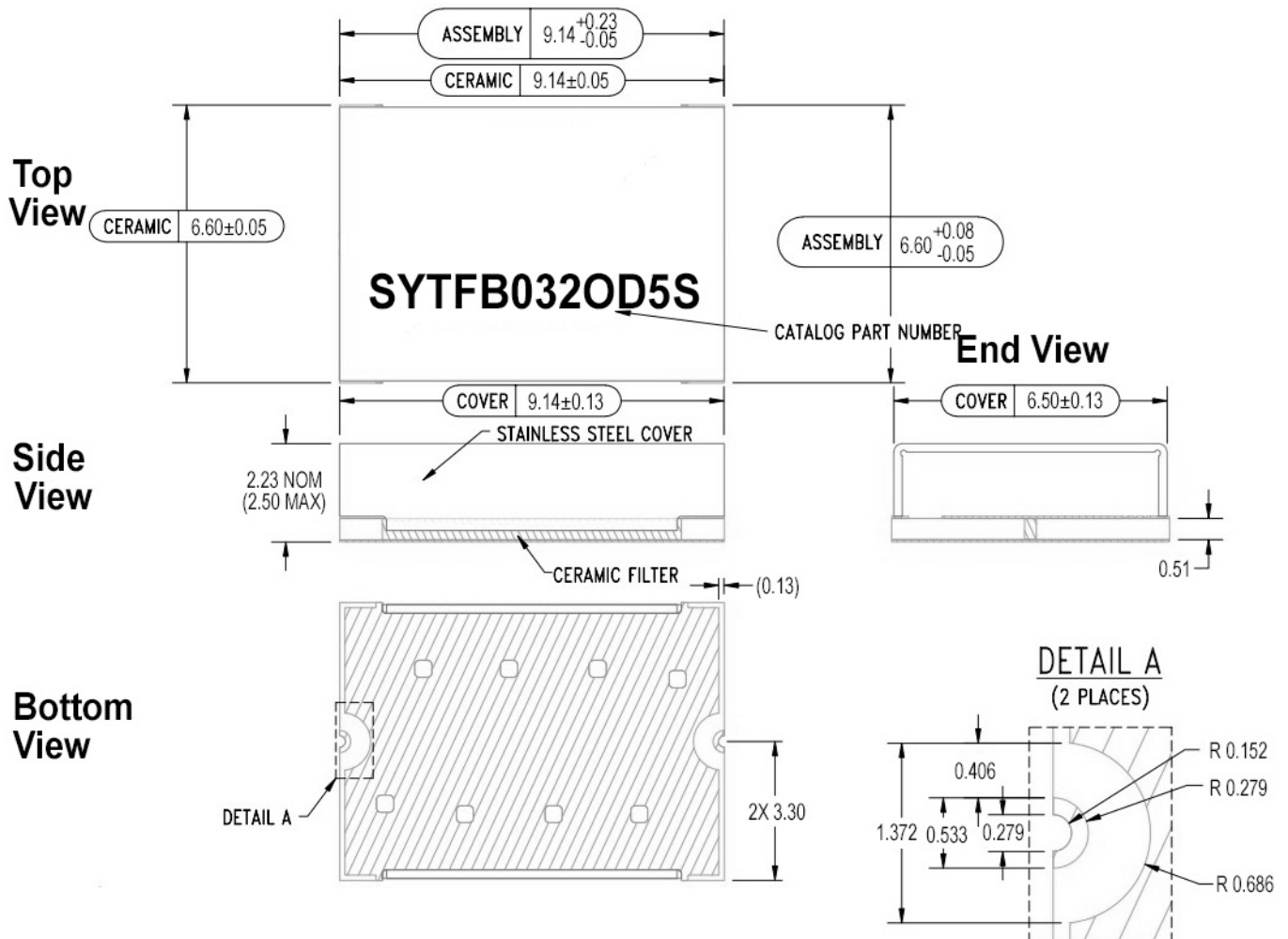
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For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

### Physical Dimensions

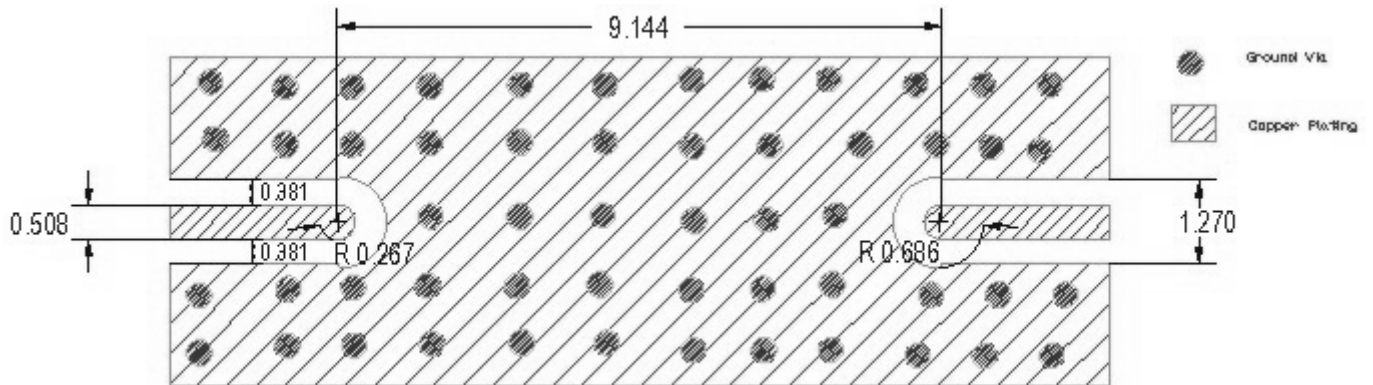
Units = mm



### Notes :

- Termination Finish:  
ENIG: 76-152  $\mu\text{m}$  Au over 1270  $\mu\text{m}$  Ni
- Maximum Assembly Process Temperature: 250°C
- Dimension tolerance:  $\pm 0.05$

### Recommended PCB Layout



Units = mm

#### Notes :

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