

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

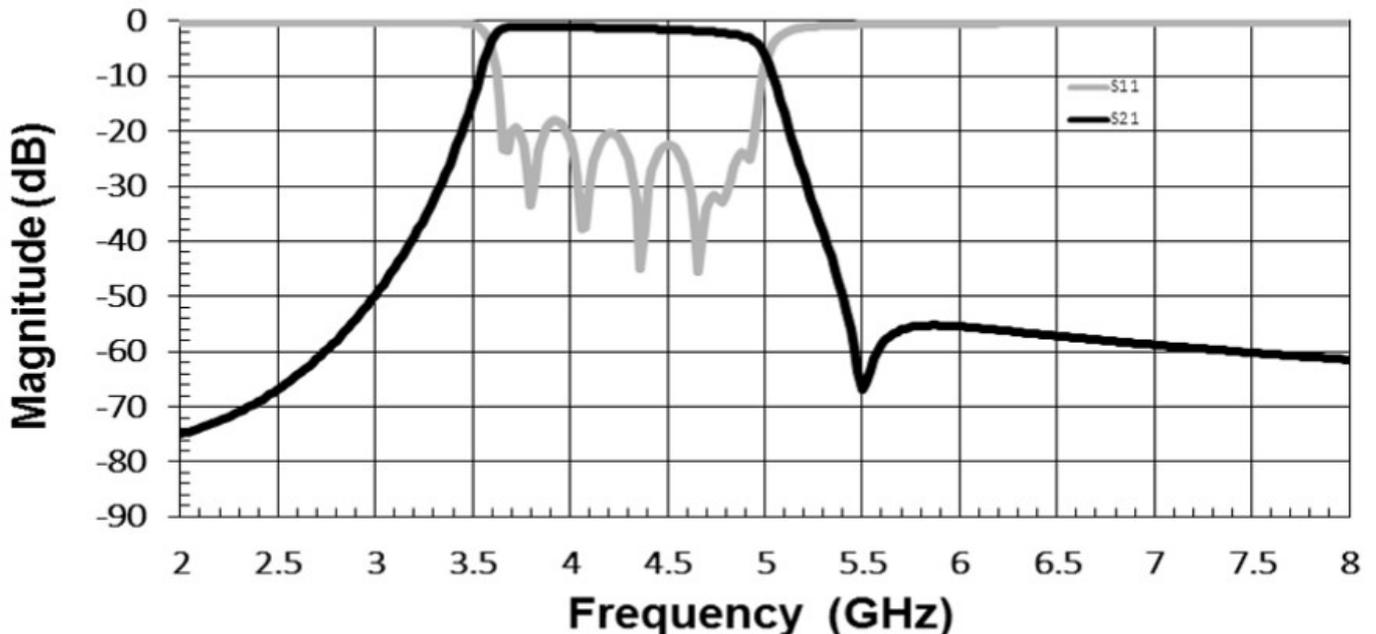
Specifications*

| Parameter | Frequency Range (GHz) | Min | Typ. | Max |
|----------------------------------------------------------------|-----------------------|-----|------|------|
| Insertion Loss (dB) | 3.75 - 4.75 | | 3.0 | 3.5 |
| Return Loss (dB) | | | 12.0 | 15.0 |
| Low Side Rejection (dB) | DC - 3.0 | | 40.0 | 45.0 |
| High Side Rejection (dB) | 5.6 - 10.0 | | 40.0 | 50.0 |
| CW Input Power** (W) | | | | 10 |
| $\theta_{jc} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$ | 7.5 | | | |
| Size (L x W x H) | 12.7 x 6.35 x 2.79 mm | | | |

*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ± 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

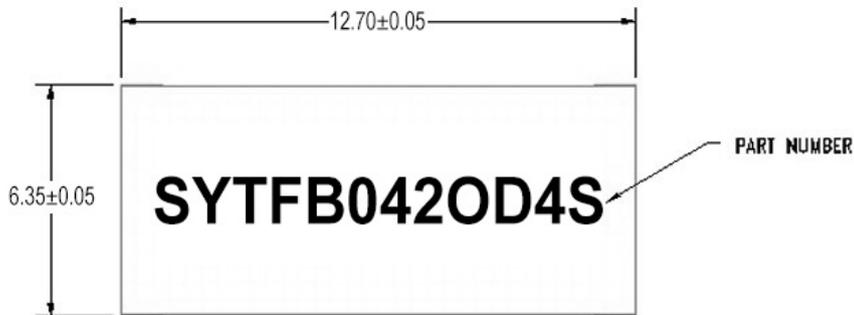


*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ω CPW ground traces going into the ports at room temperature.

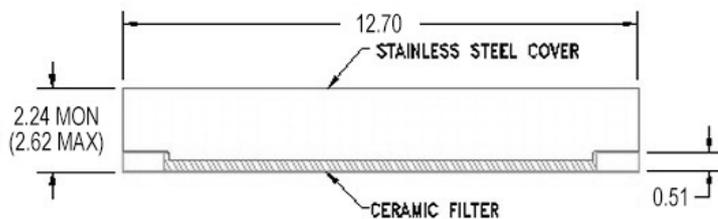
Physical Dimensions

Units = mm

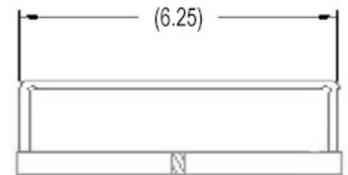
Top View



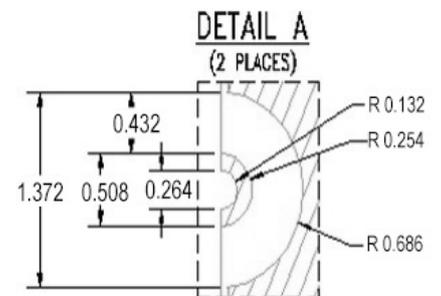
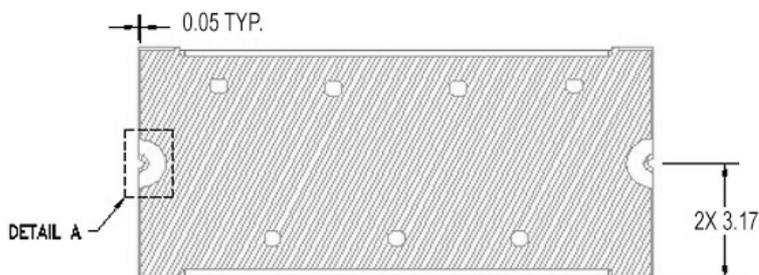
Side View



End View



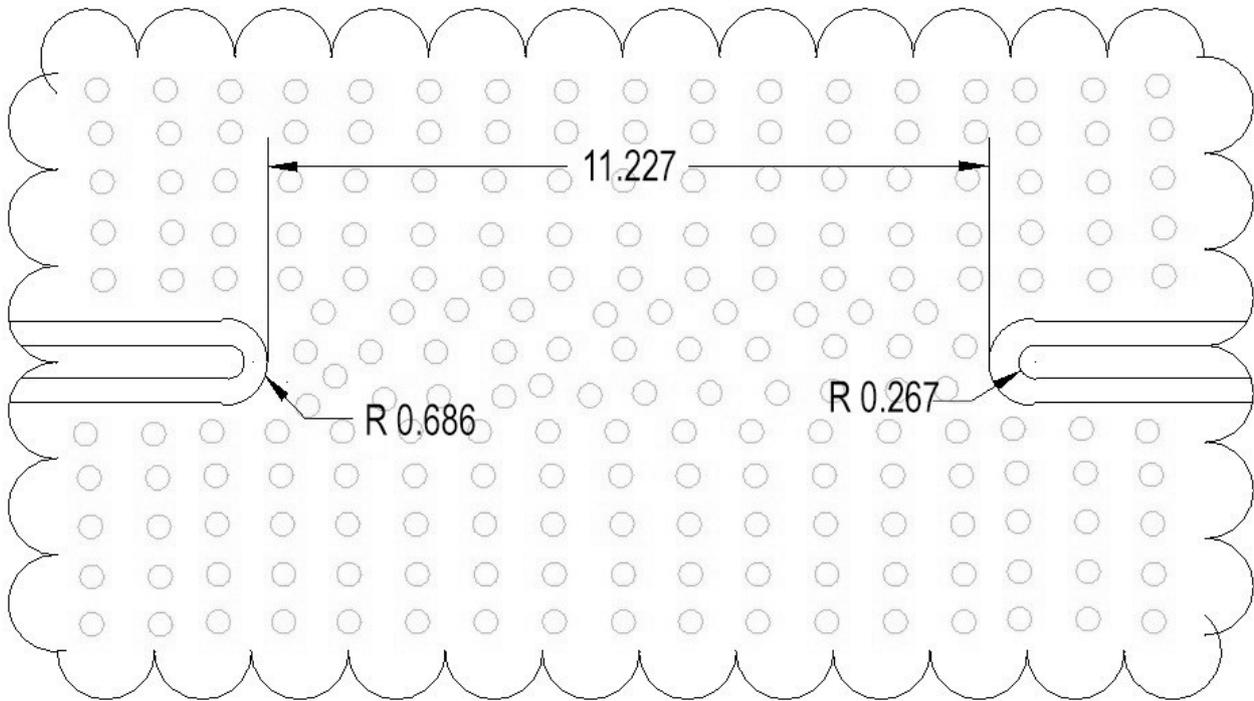
Bottom View



Notes :

1. Termination Finish:
ENIG: 76-152 μm Au over 1270 μm Ni
2. Maximum Assembly Process Temperature: 250°C
3. Dimension tolerance: ± 0.05

Recommended PCB Layout



Units = mm

Note:

- 50Ω trace dimensions are application specific.
- Ensure adequate grounding beneath the part.