

### 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

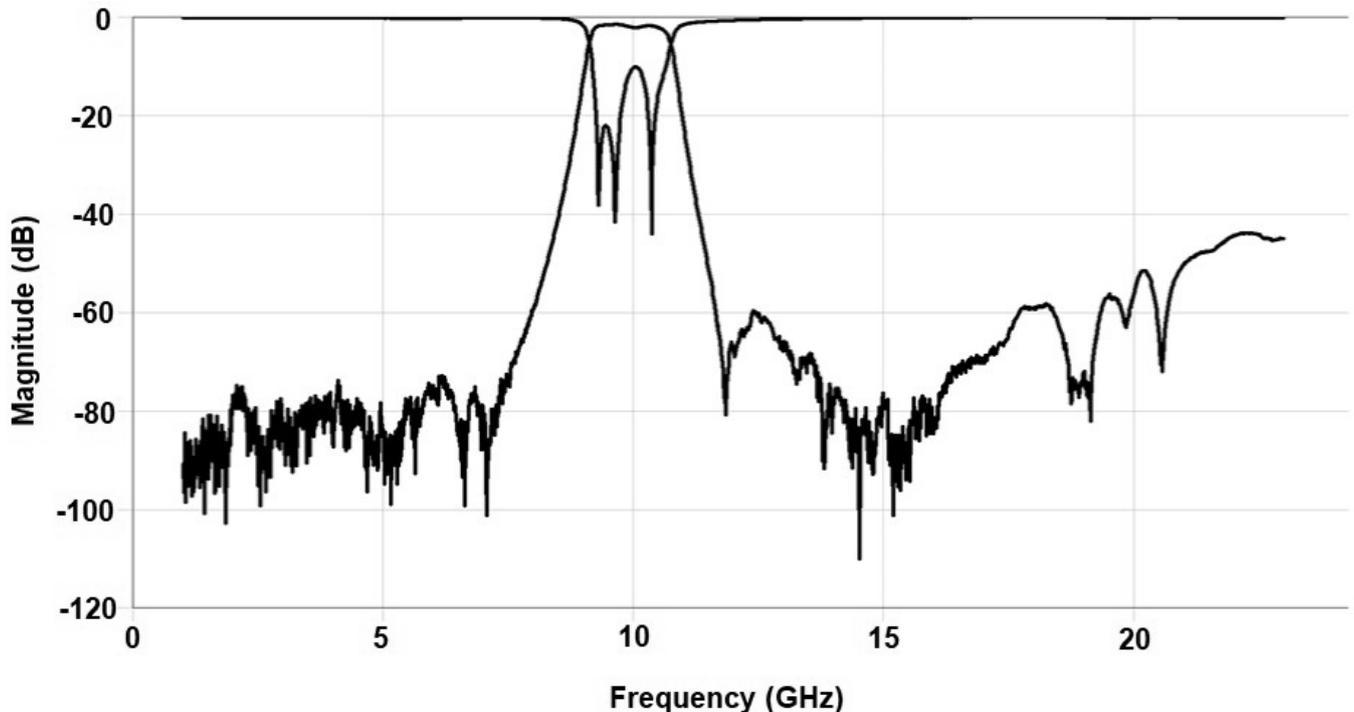
### Specifications\*

| Parameter  | Frequency Range (GHz)  | Min  | Typ. | Max  |
|--|------------------------|------|------|------|
| Insertion Loss (dB)                              | 9.3 - 10.1             |      | 2.5  | 2.75 |
| Return Loss (dB)                                 |                        | 10.0 | 14.0 |      |
| Low Side Rejection (dB)                          | DC - 8.1               | 40.0 | 45.0 |      |
| High Side Rejection (dB)                         | 11.35 - 23.0           | 40.0 | 45.0 |      |
| CW Input Power** (W)                             |                        |      |      | 10   |
| $\theta_{jc} \left( \frac{^{\circ}C}{W} \right)$ | 7.5                    |      |      |      |
| Size (L x W x H)                                 | 10.16 x 3.81 x 2.62 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 50.00ohm CPW ground traces going into the ports at room temperature.

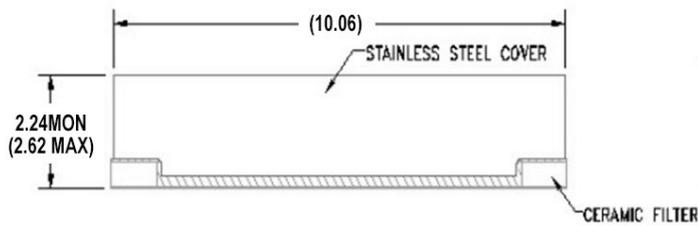
### Physical Dimensions

Units = mm

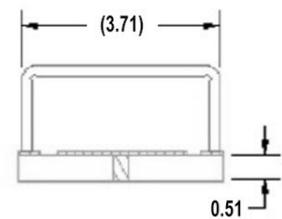
#### Top View



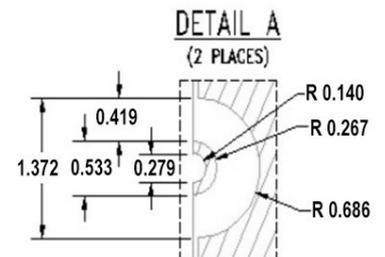
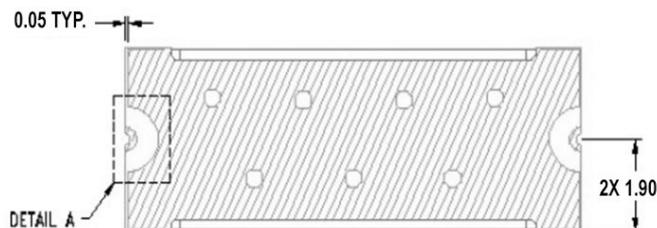
#### Side View



#### End View



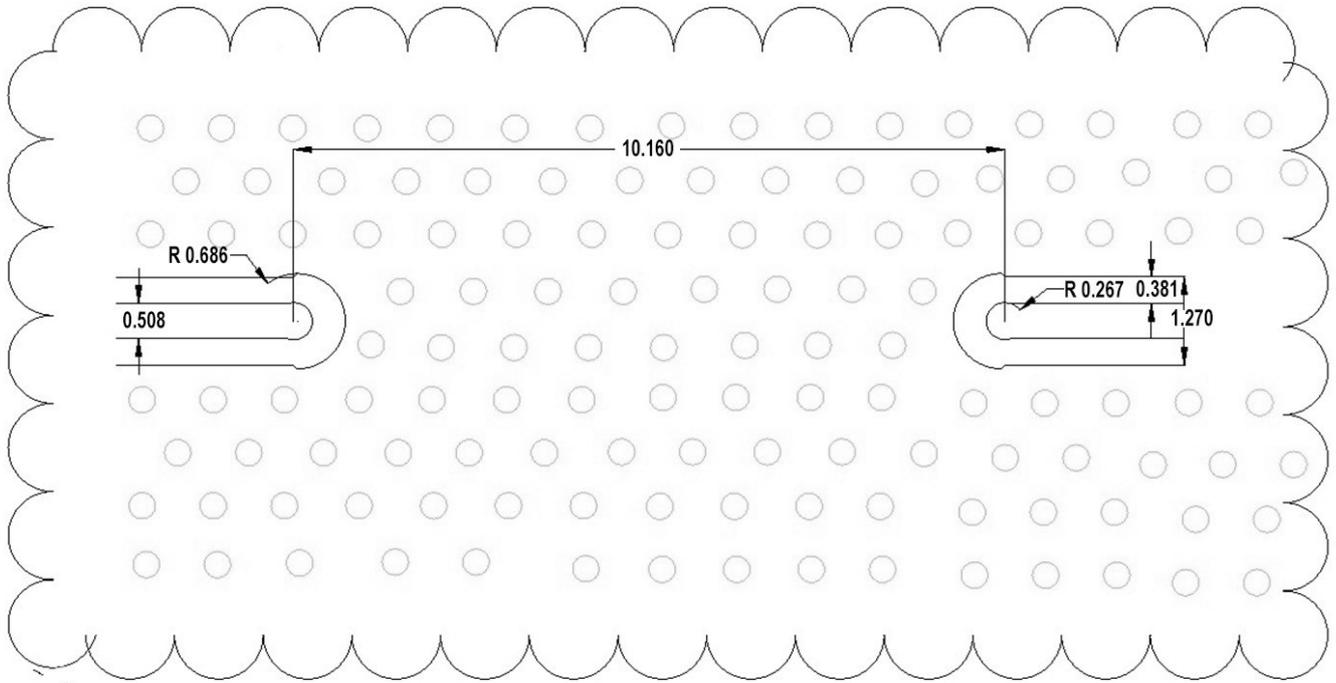
#### Bottom View



### Notes :

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

### Recommended PCB Layout



Unit =mm

**Note:**

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