

### 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

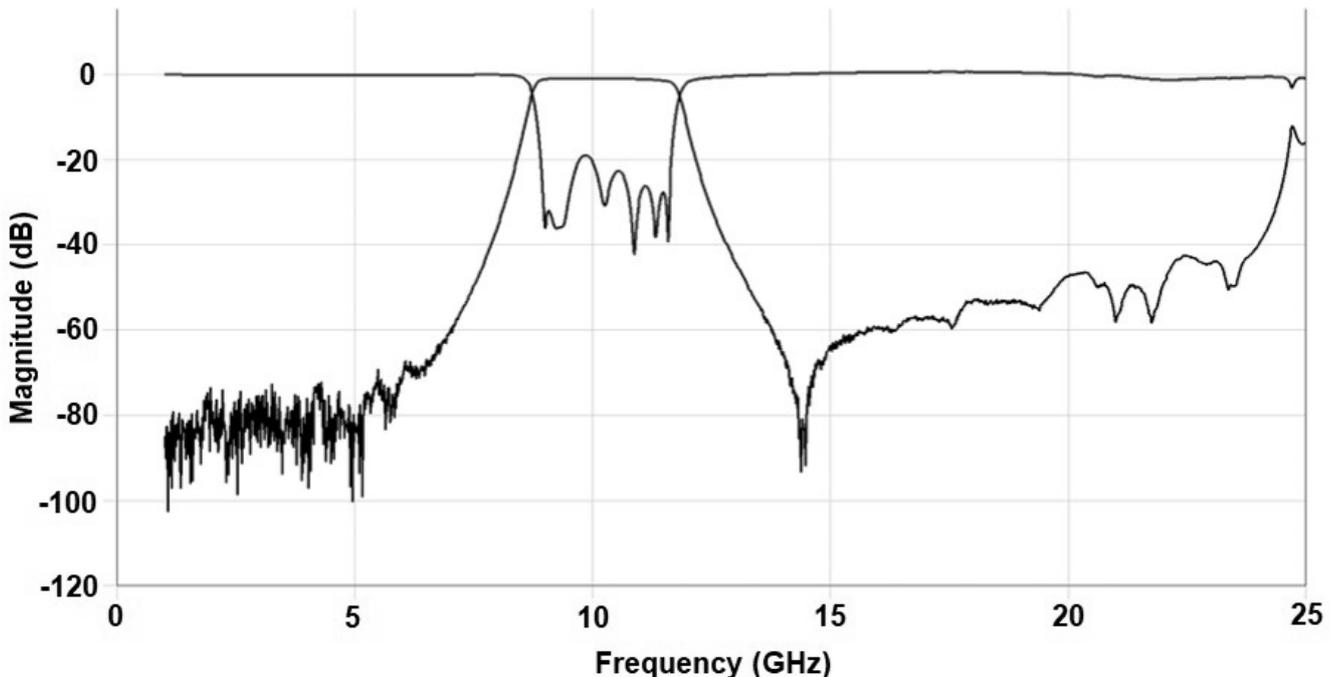
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	9.0 - 11.0		1.2	2.25
Return Loss (dB)		10.0	18.0	
Low Side Rejection (dB)	DC - 7.35	40.0	48.0	
High Side Rejection (dB)	13.0 - 23.0	40.0	48.0	
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

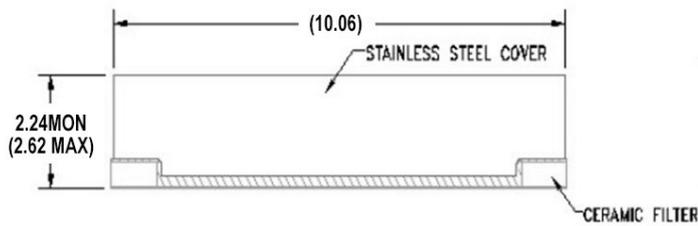
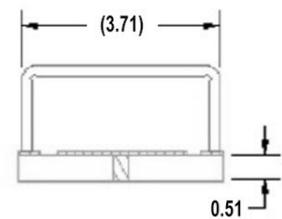
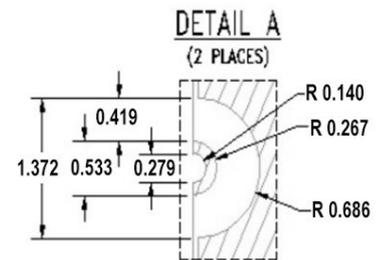
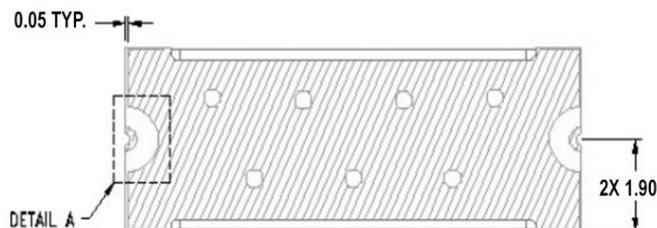


\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.

**Physical Dimensions**

Units = mm

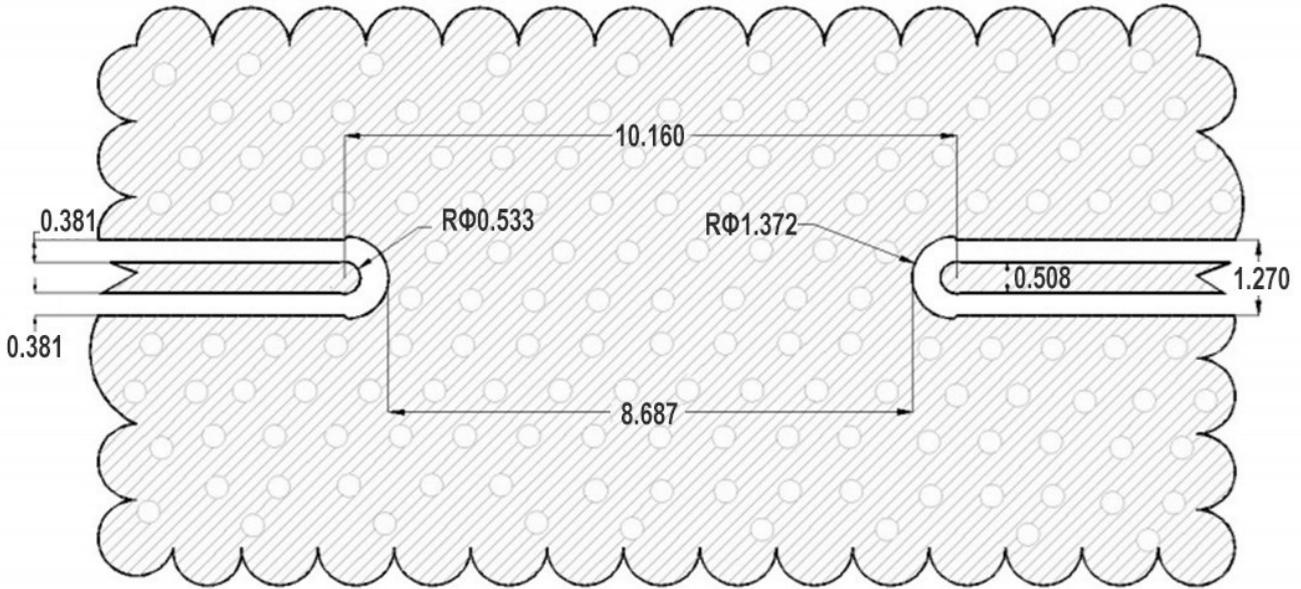
**Top View**

**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



**PCB RECOMMENDED STACKUP**

Filter is matched to RF layer stackup seen below

Dimensions are specified below in mm (not to scale)

- Board material : RO4350b
- Board material design dk : 3.66
- CPWG : 0.51mm trace width,0.38mm gaps

