

### 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

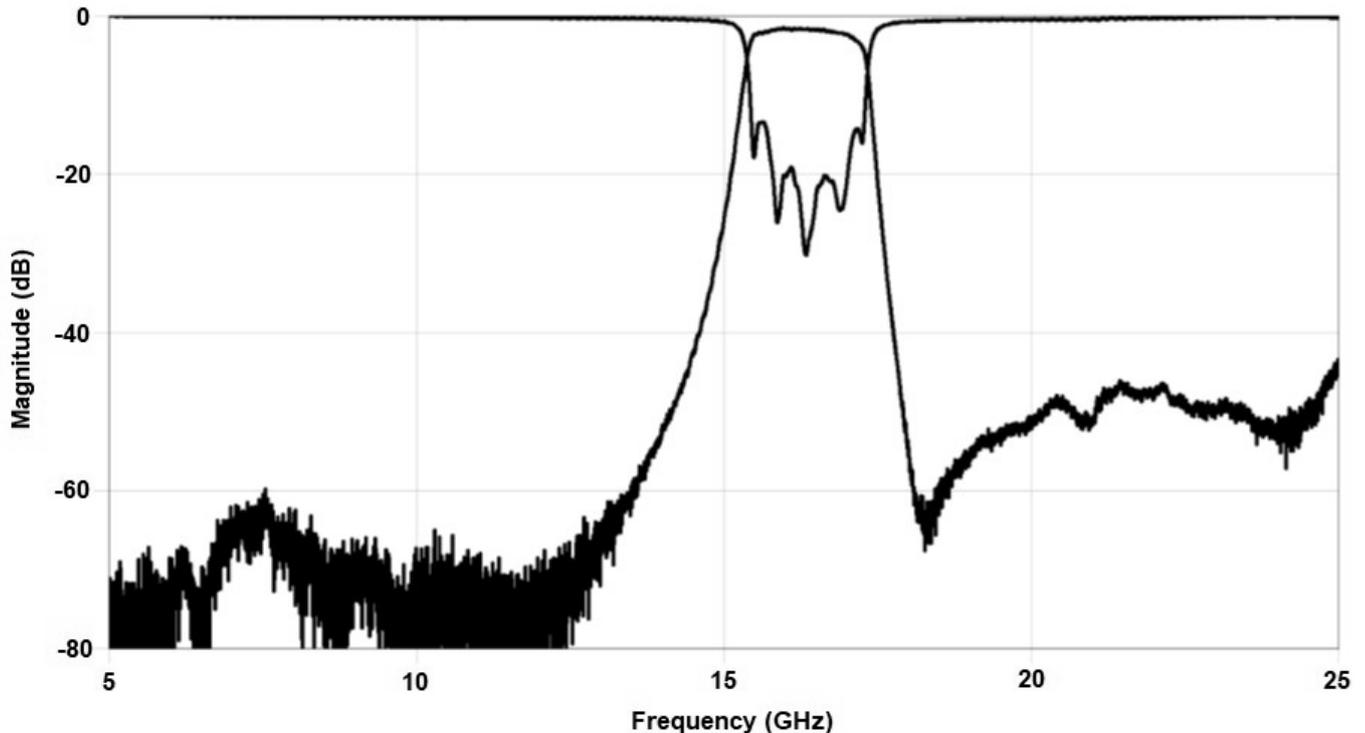
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	16.0 - 17.0		2.75	3.0
Return Loss (dB)		12	15	
Low Side Rejection (dB)	DC – 14.5	40	45	
High Side Rejection (dB)	18.0 - 25.0	40	45	
CW Input Power** (W)				5
$\theta_{JC} \left( \frac{^{\circ}C}{W} \right)$	15			
Size (L x W x H)	10.16 x 5.08 x 2.36 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.

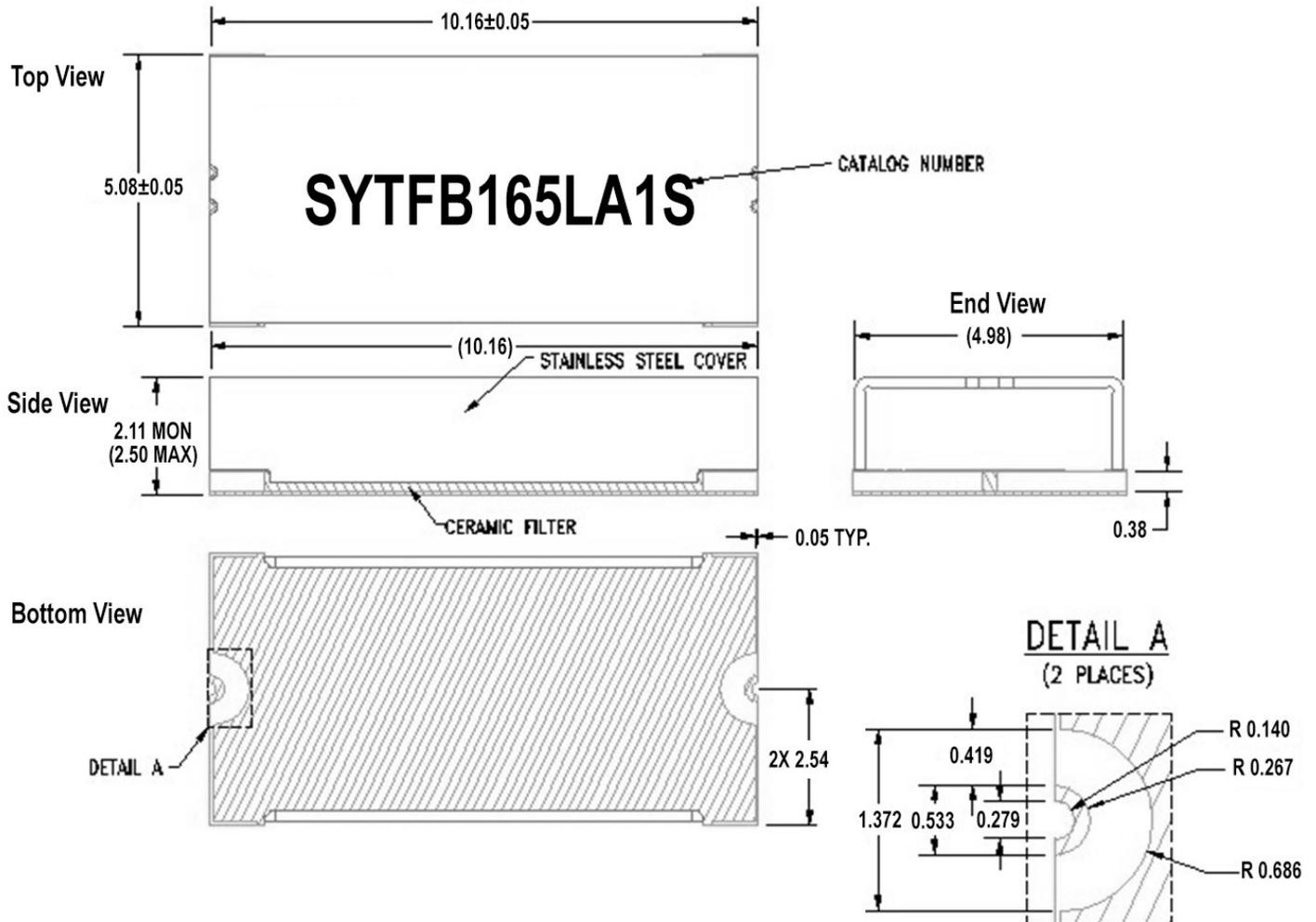
### Typical Measured Performance



\*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

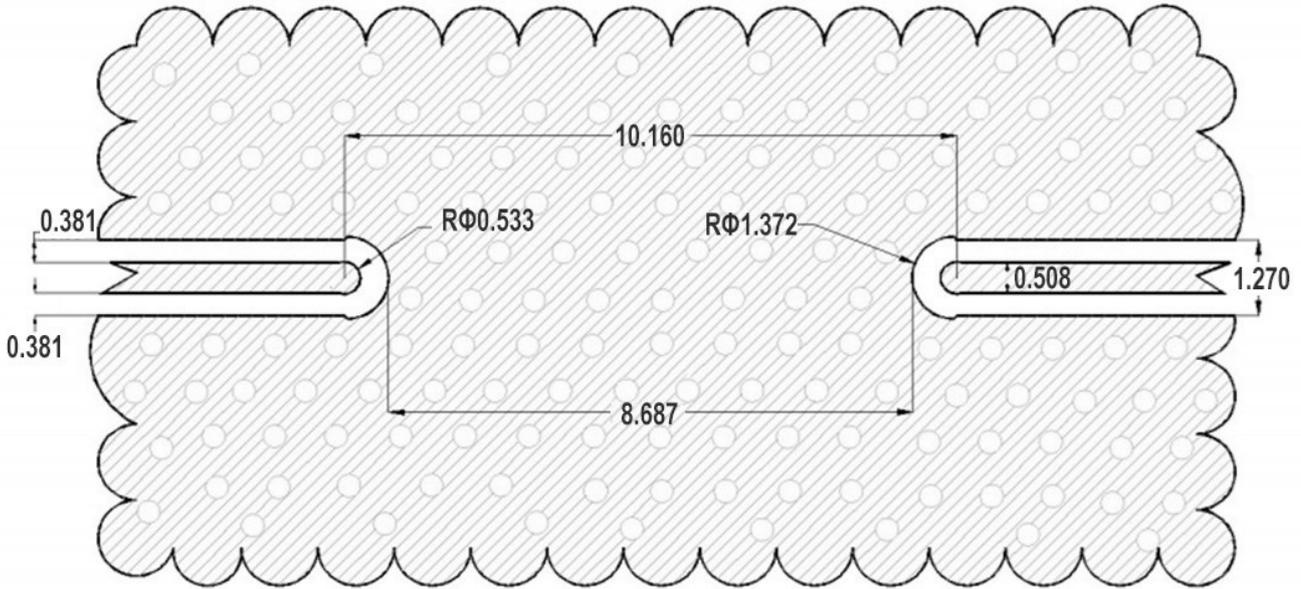


### Notes :

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

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

