

### 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

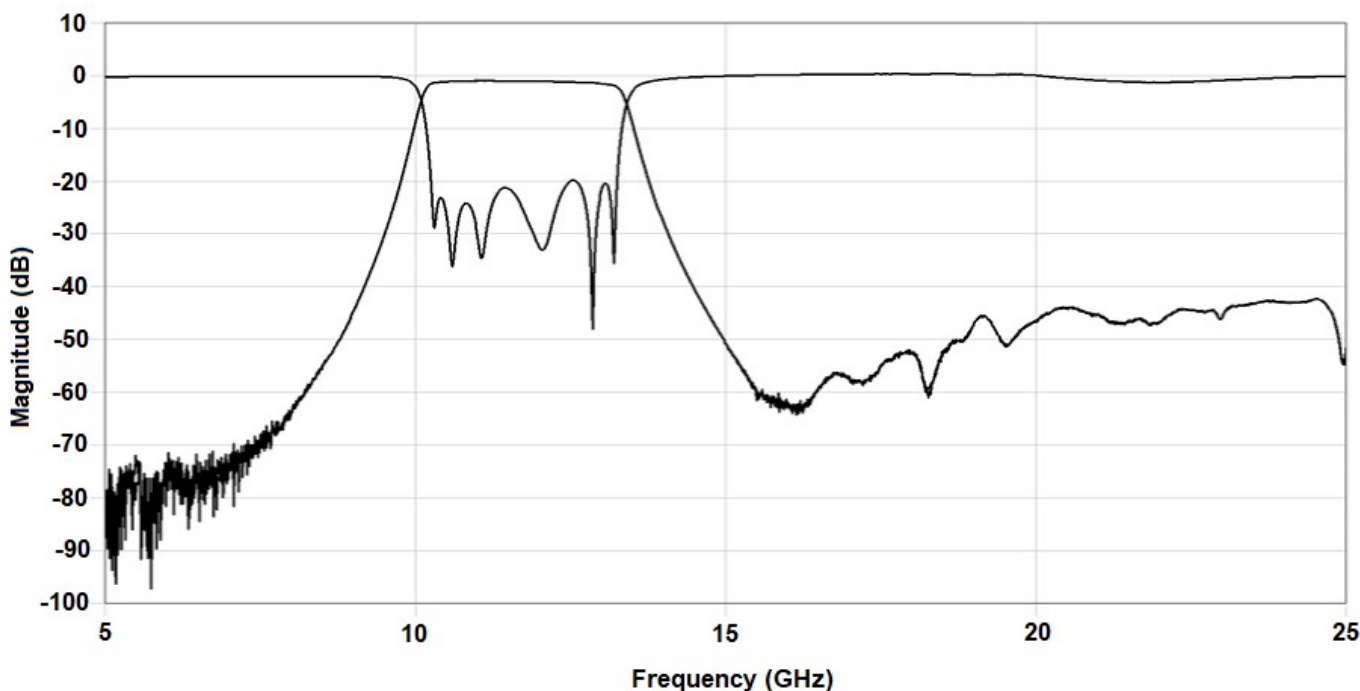
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	10.25 - 12.5		2.0	2.25
Return Loss (dB)		10	12	
Low Side Rejection (dB)	DC – 8.5	40	48	
High Side Rejection (dB)	14.5 - 23.5	40	48	
CW Input Power** (W)				10
$\theta_{JC} \left( \frac{^{\circ}\text{C}}{\text{W}} \right)$	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.

### Yantel Corporation

Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan Road 35,Xili Street,Nanshan,Shenzhen,China

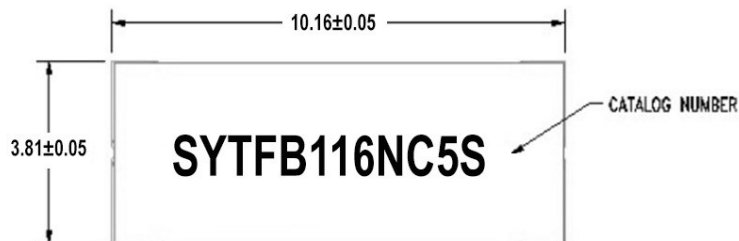
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

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

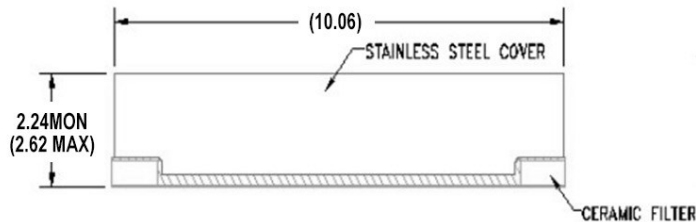
## Physical Dimensions

Units = mm

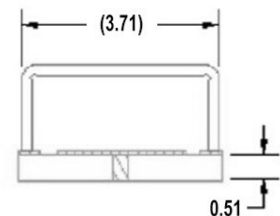
### Top View



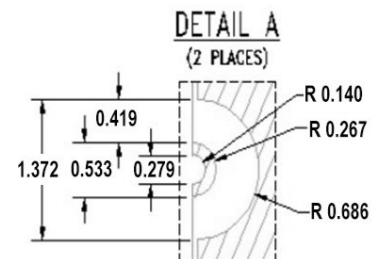
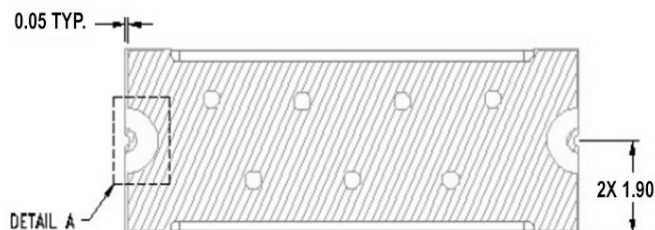
### Side View



### End View



### Bottom View

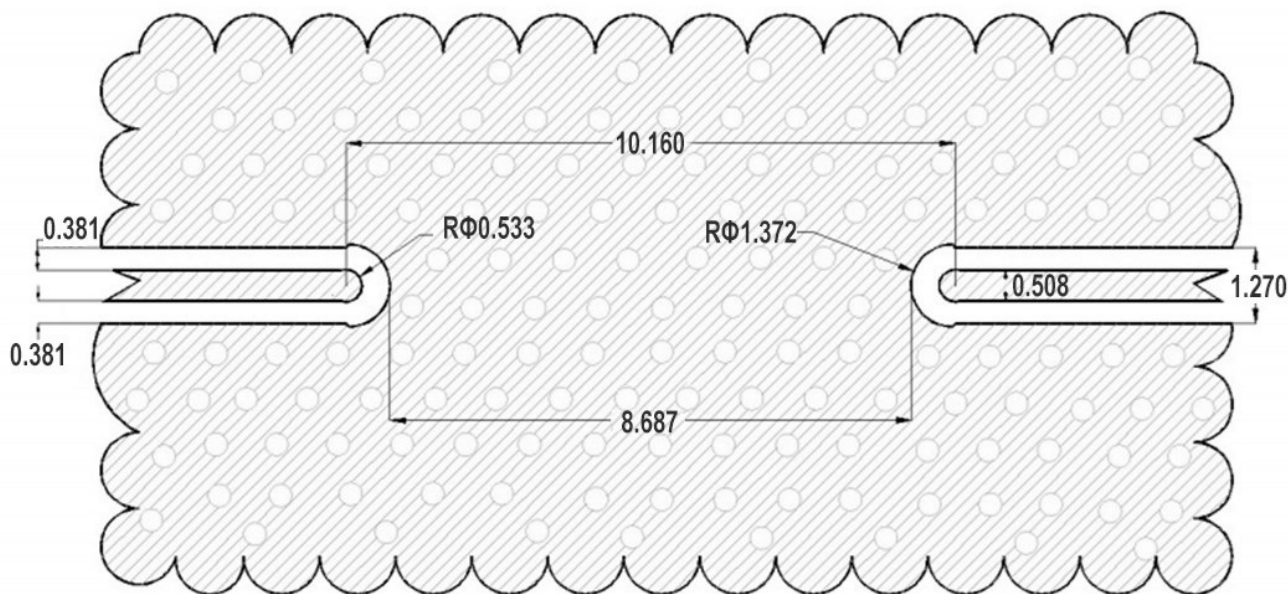


### Notes :

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

## Recommended PCB Layout

Unit =mm



**PWB TOP METAL**



**PWB DRILL**

## 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



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