

### 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

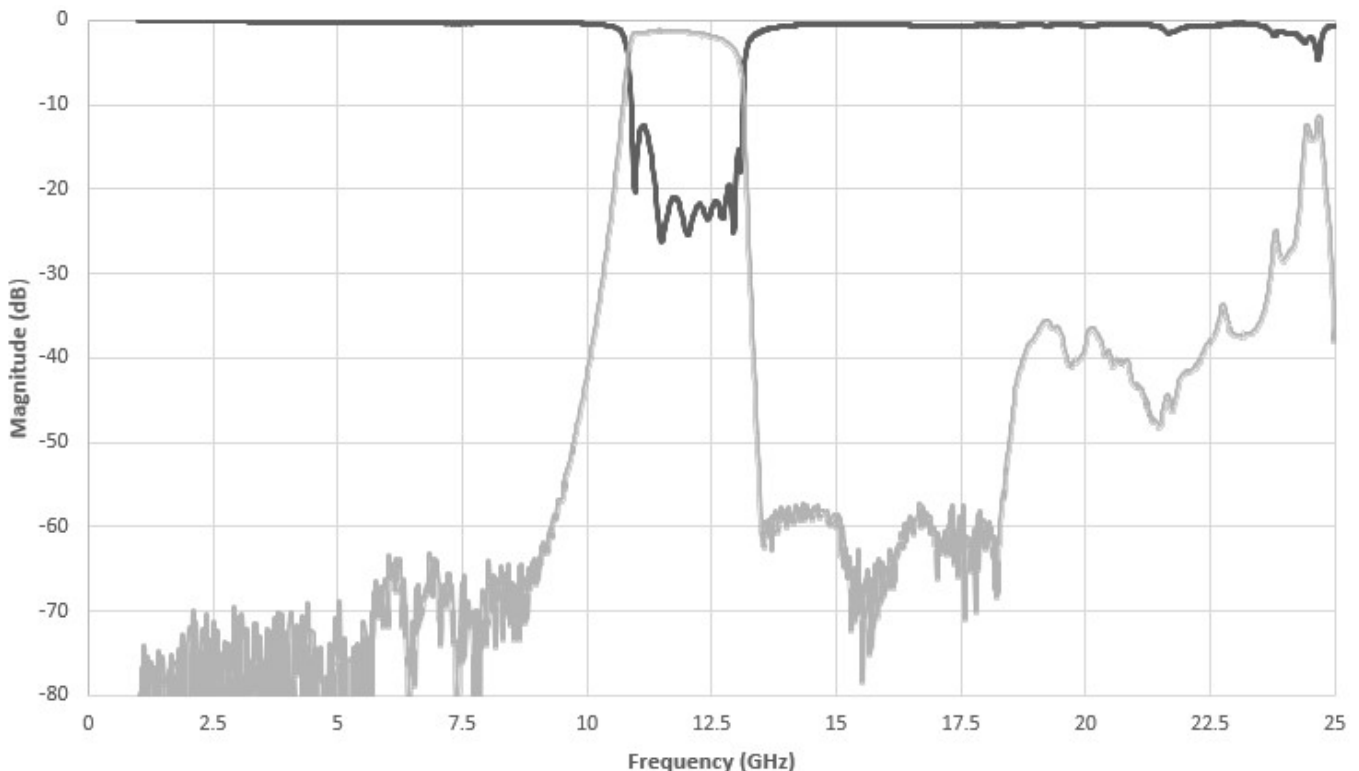
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	10.95 - 12.75		3.0	3.75
Return Loss (dB)		10	14	
Low Side Rejection (dB)	DC – 9.8	40	45	
High Side Rejection (dB)	13.75 - 20.0	40	45	
CW Input Power** (W)				5
$\theta_{jc} \left( \frac{^{\circ}\text{C}}{\text{W}} \right)$	15			
Size (L x W x H)	0.450 x 0.200 x 0.098 in 11.43 x 5.0 x 2.49 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 50.0Ω CPW ground traces going into the ports at room temperature.

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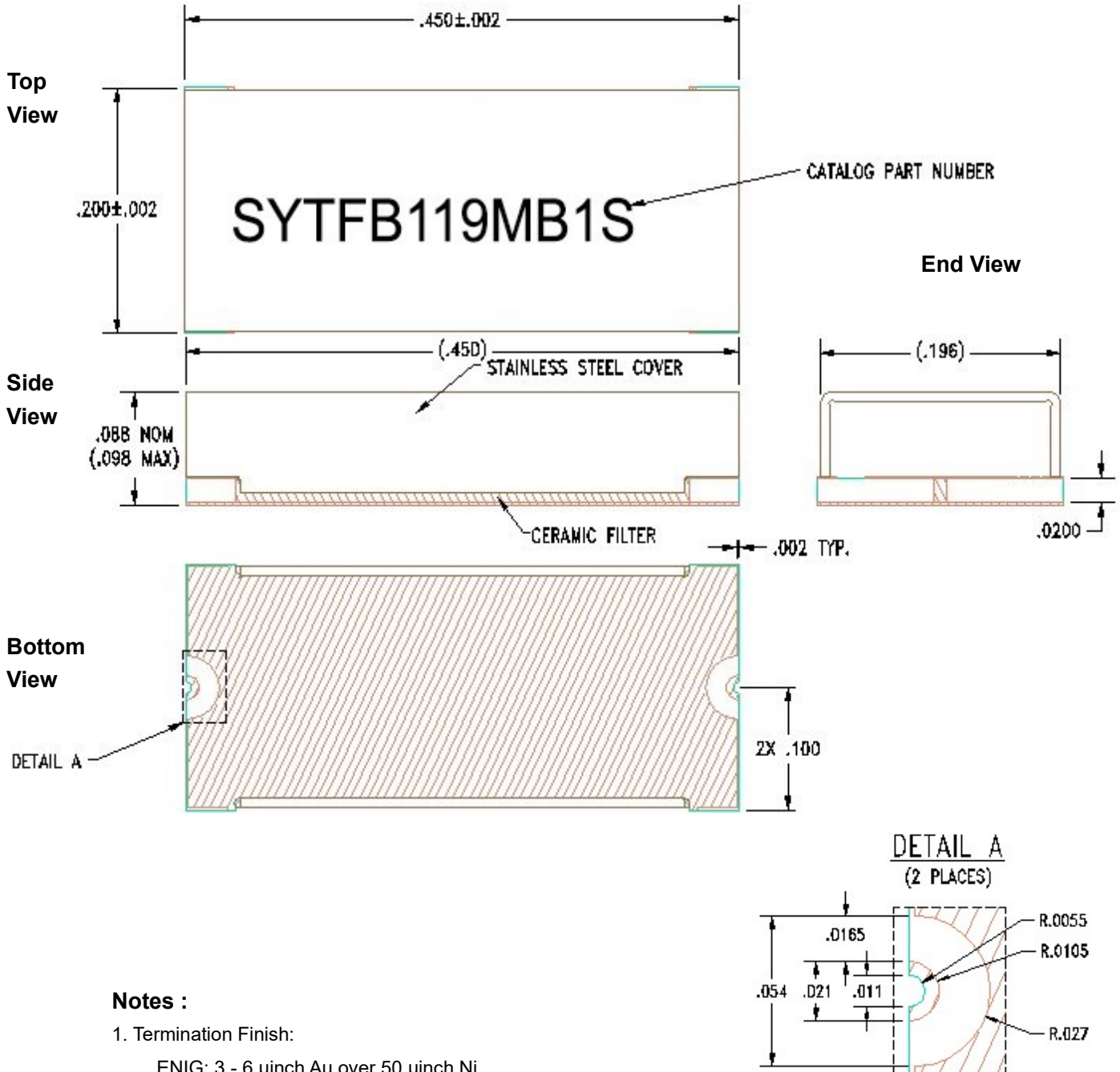
Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan Road 35,Xili Street,Nanshan,Shenzhen,China

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 = inches



### Notes :

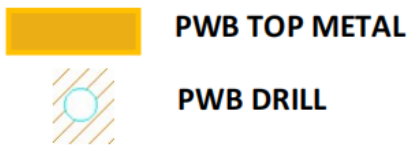
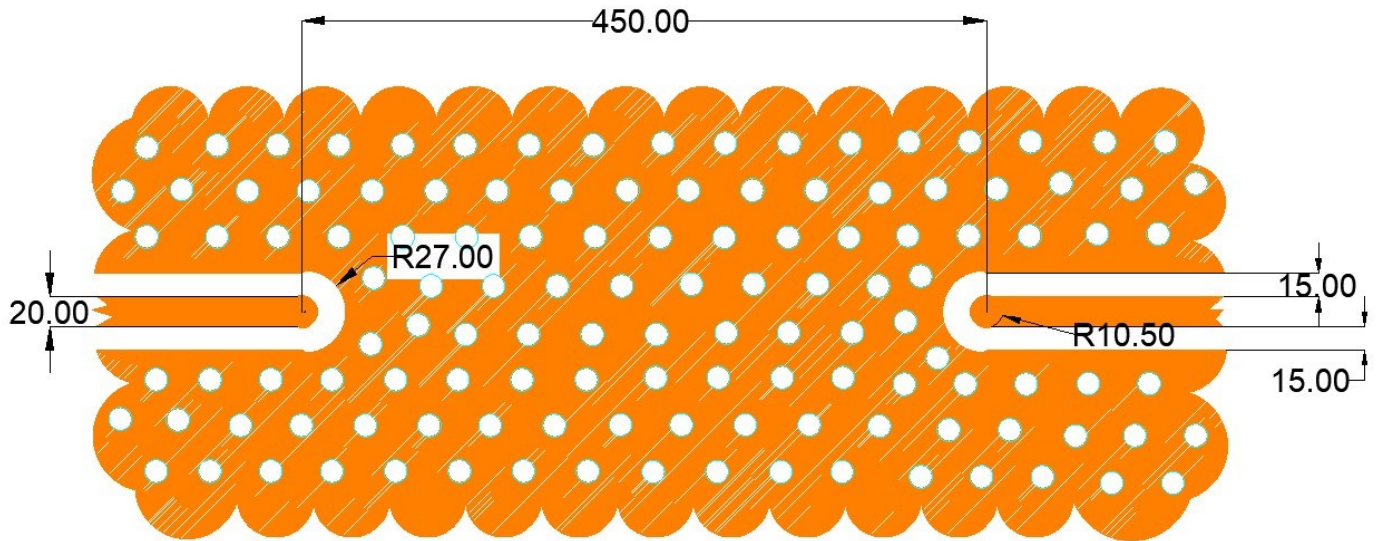
- Termination Finish:  
ENIG: 3 - 6  $\mu$ inch Au over 50  $\mu$ inch Ni
- Maximum Assembly Process Temperature: 250°C

### Tolerances:

- For values with 3 decimal places  $\pm 0.001$
- For values with 4 decimal places  $\pm 0.0005$

### Recommended PCB Layout

Unit =mils

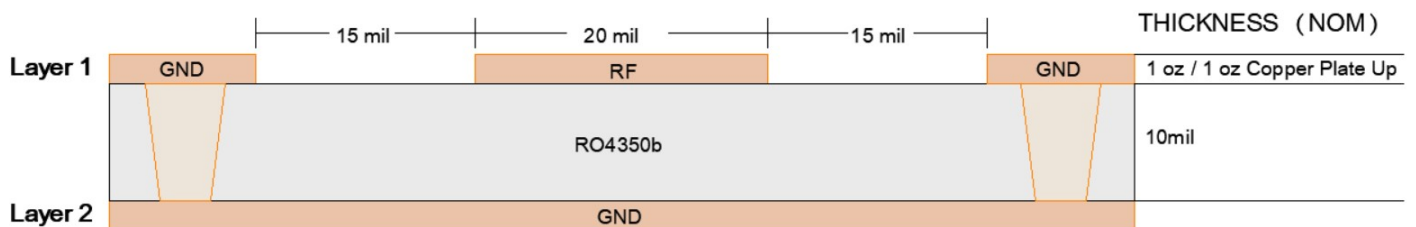


### PCB RECOMMENDED STACKUP

Filter is matched to RF layer stackup seen below

Dimensions are specified below in inches ( not to scale)

- Board material : RO4350b
- Board material design dk : 3.66
- CPWG : 20mil trace width, 15mil gaps



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