

### 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

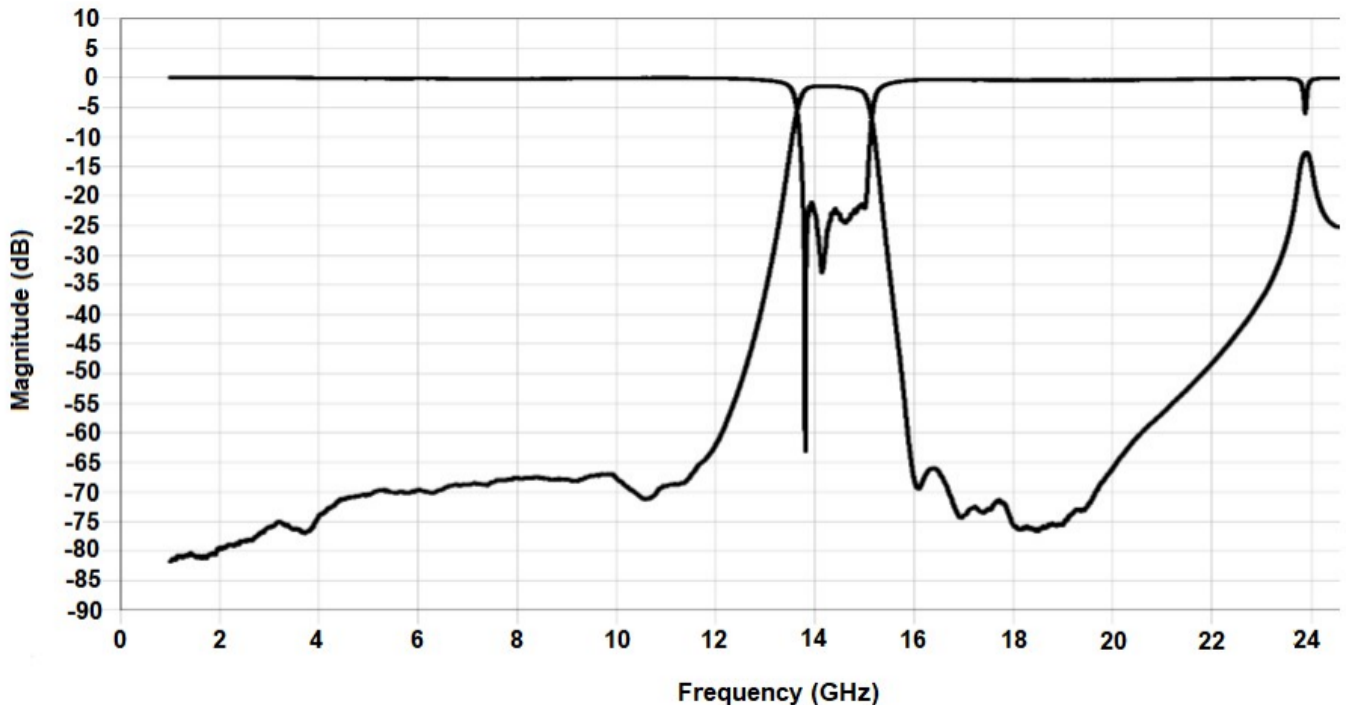
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	14.1 - 14.9	2.75	3.0	3.5
Return Loss (dB)		10.0	14.0	
Low Side Rejection (dB)	DC - 11.75	60.0	65.0	
High Side Rejection (dB)	16.5 - 19.5	60.0	65.0	
CW Input Power** (W)				5
$\theta_{jc} \left( \frac{^{\circ}\text{C}}{\text{W}} \right)$	15			
Size (L x W x H)	0.550 x 0.230 x 0.093 in 13.97 x 5.84 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.

### Yantel Corporation

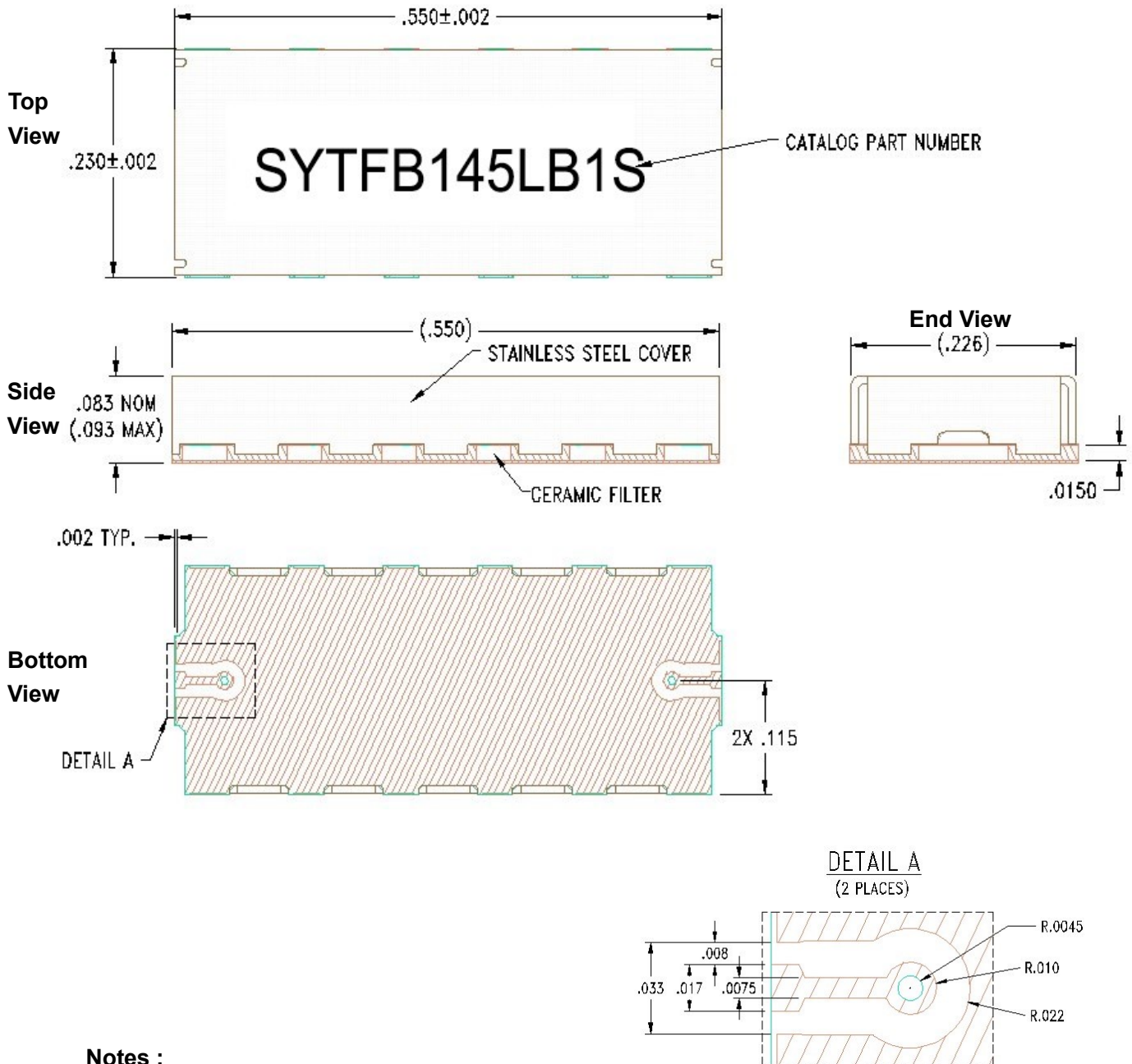
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For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

**Physical Dimensions**

Units = inches


**Notes :**

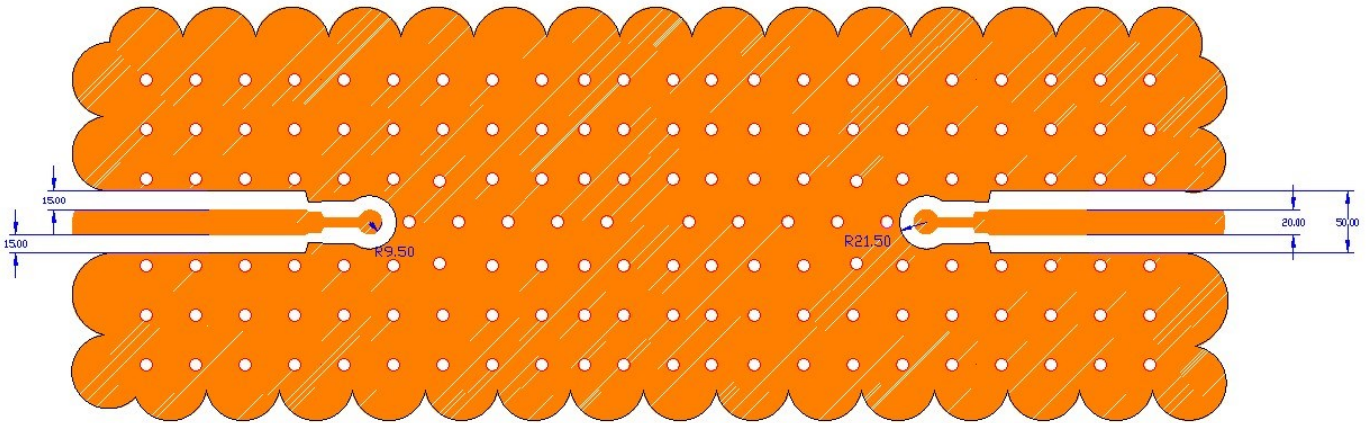
- Termination Finish:  
 ENIG: 3 - 6  $\mu$ inch Au over 50  $\mu$ inch Ni
- Maximum Assembly Process Temperature: 250°C

**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

