

### 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

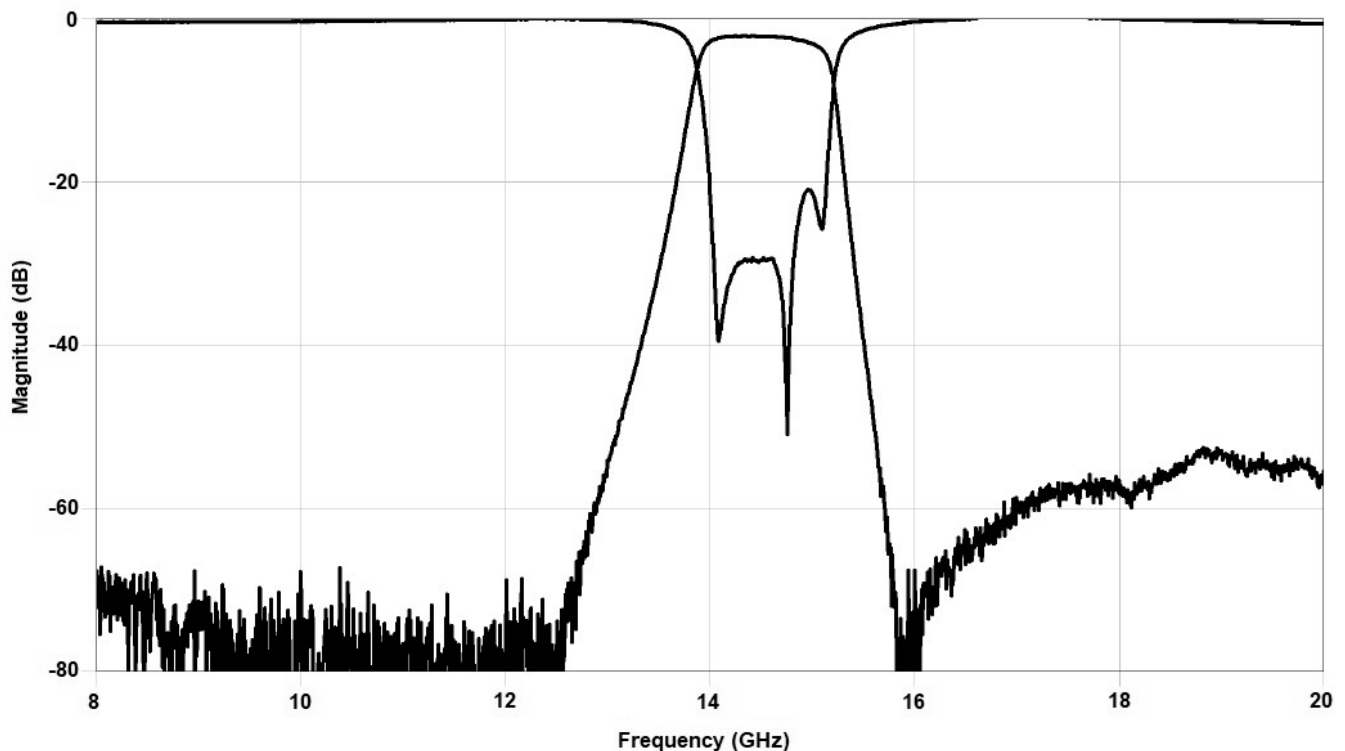
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	14.5 - 15.0		3.25	3.5
Return Loss (dB)		12.0	15.0	
Low Side Rejection (dB)	DC - 13.25	40.0	45.0	
High Side Rejection (dB)	16.0 - 21.0	40.0	45.0	
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 0.180 x 0.098 in 11.43 x 4.57 x 2.5 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.

### Yantel Corporation

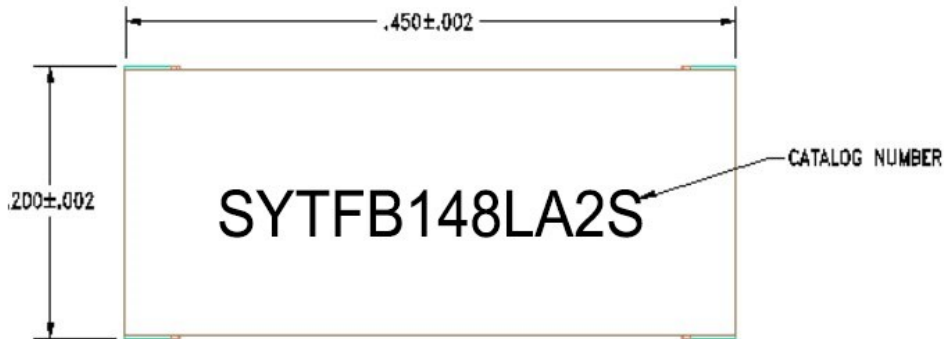
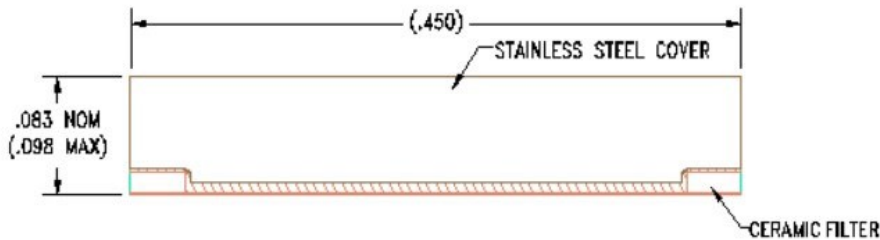
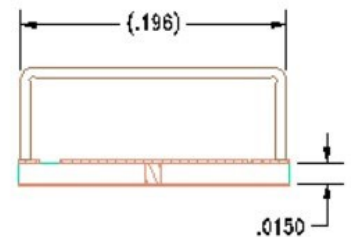
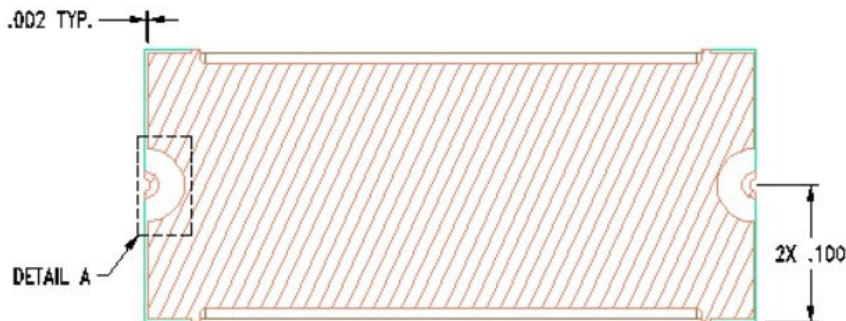
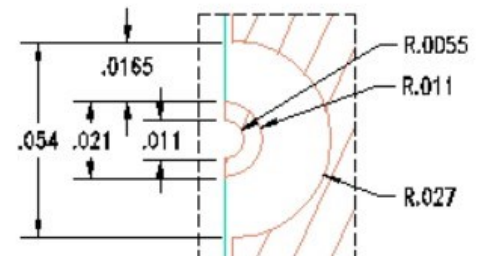
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For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

**Physical Dimensions**

Units = inches

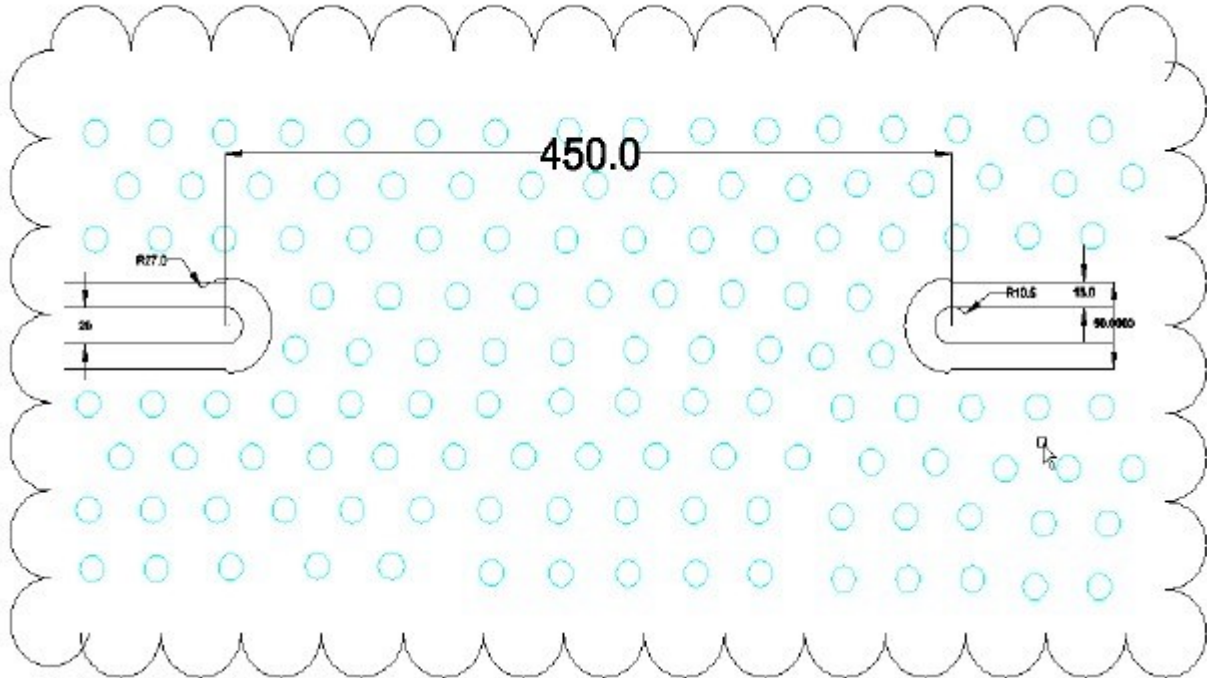
**Top View**

**Side View**

**End View**

**Bottom View**

**DETAIL A**  
(2 PLACES)

**Notes :**

- Termination Finish:  
ENIG: 3 - 6  $\mu\text{inch}$  Au over 50  $\mu\text{inch}$  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

### Note:

- 50Ω trace dimensions are application specific.
- Ensure adequate grounding beneath the part.