

### 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

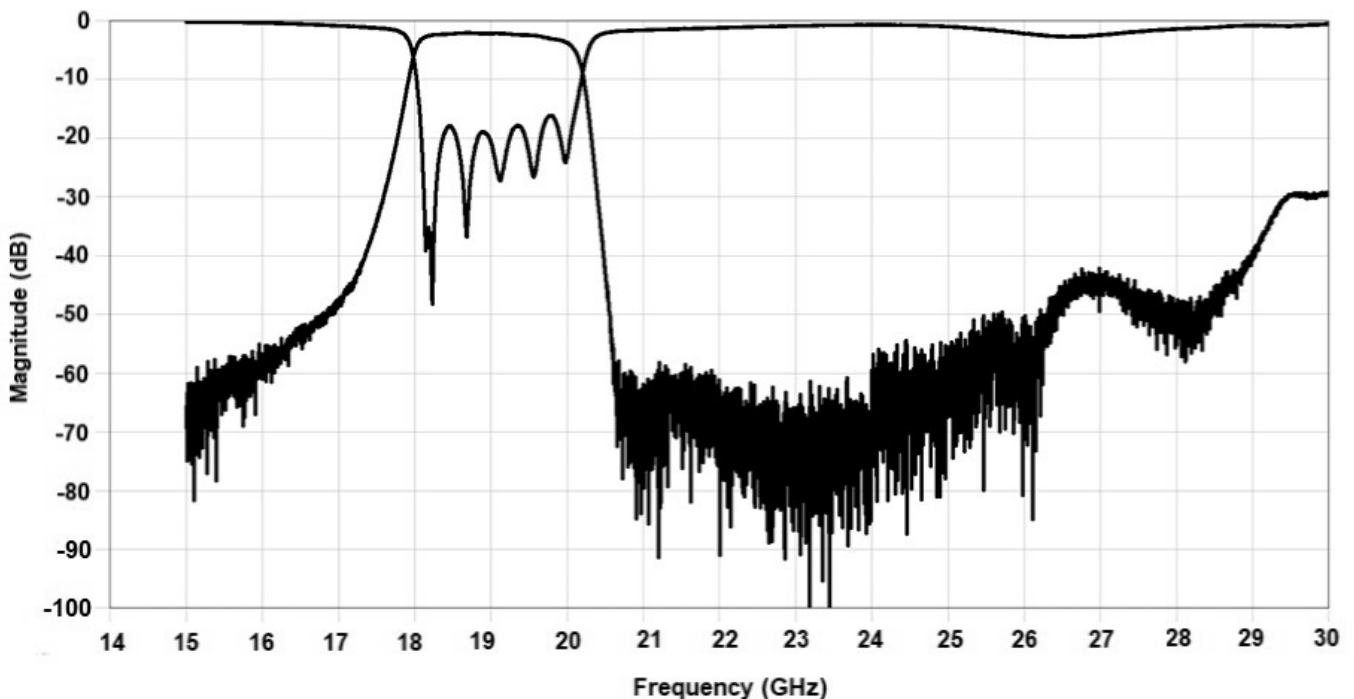
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	18.5 - 19.5		2.5	3.0
Return Loss (dB)		10.0	20.0	
Low Side Rejection (dB)	DC - 17.0	40.0	48.0	
High Side Rejection (dB)	20.7 - 28.0	40.0	50.0	
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 0.175 x 0.093 in 11.43 x 4.45 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.

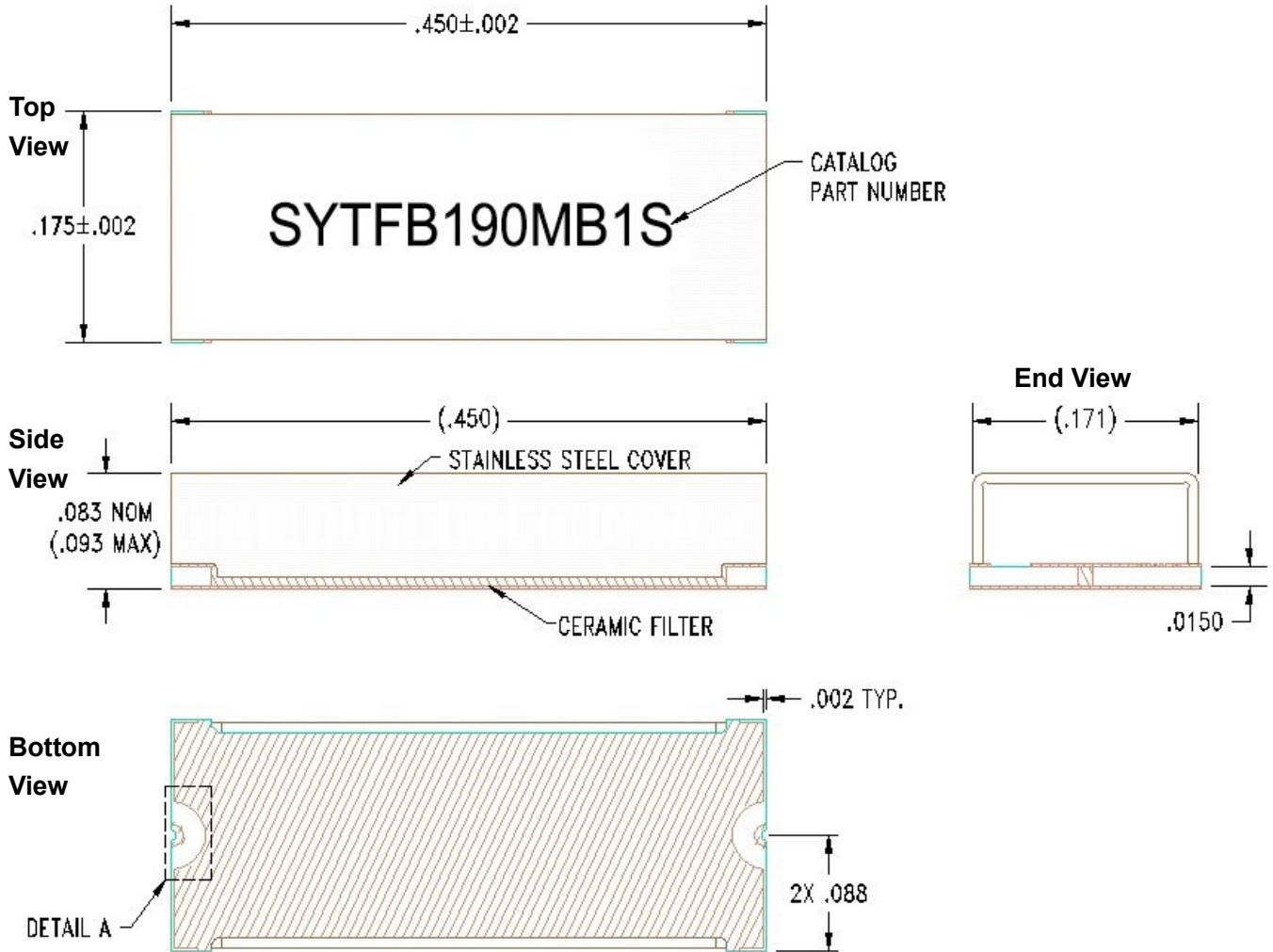
### Typical Measured Performance



\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.

### Physical Dimensions

Units = inches

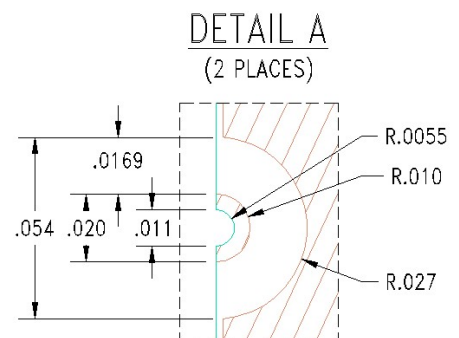


### Notes :

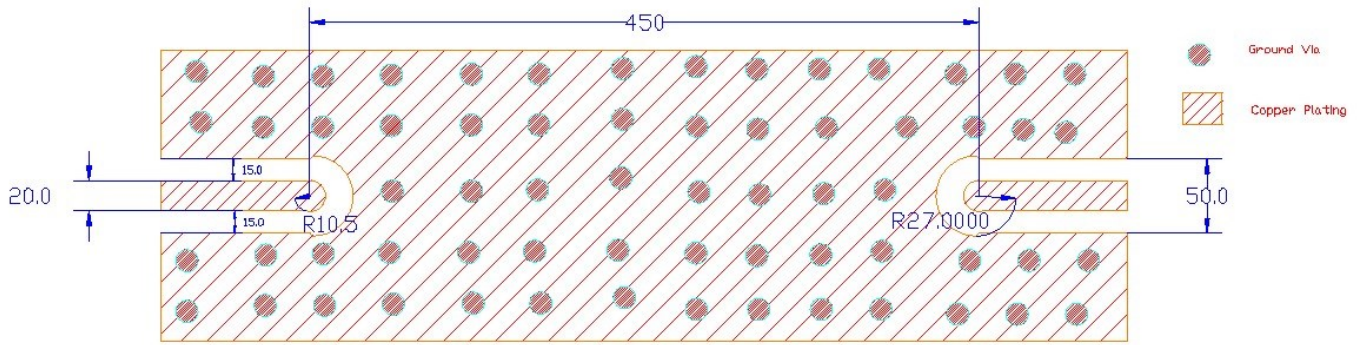
- Termination Finish:  
ENIG: 3 - 6  $\mu$ inch Au over 50  $\mu$ inch Ni
- Maximum Assembly Process Temperature: 250°C

### Tolerances:

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



### Recommended PCB Layout



Unit = mils

**Note:**

- 50 $\Omega$  trace dimensions are application specific.
- Ensure adequate grounding beneath the part.