

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

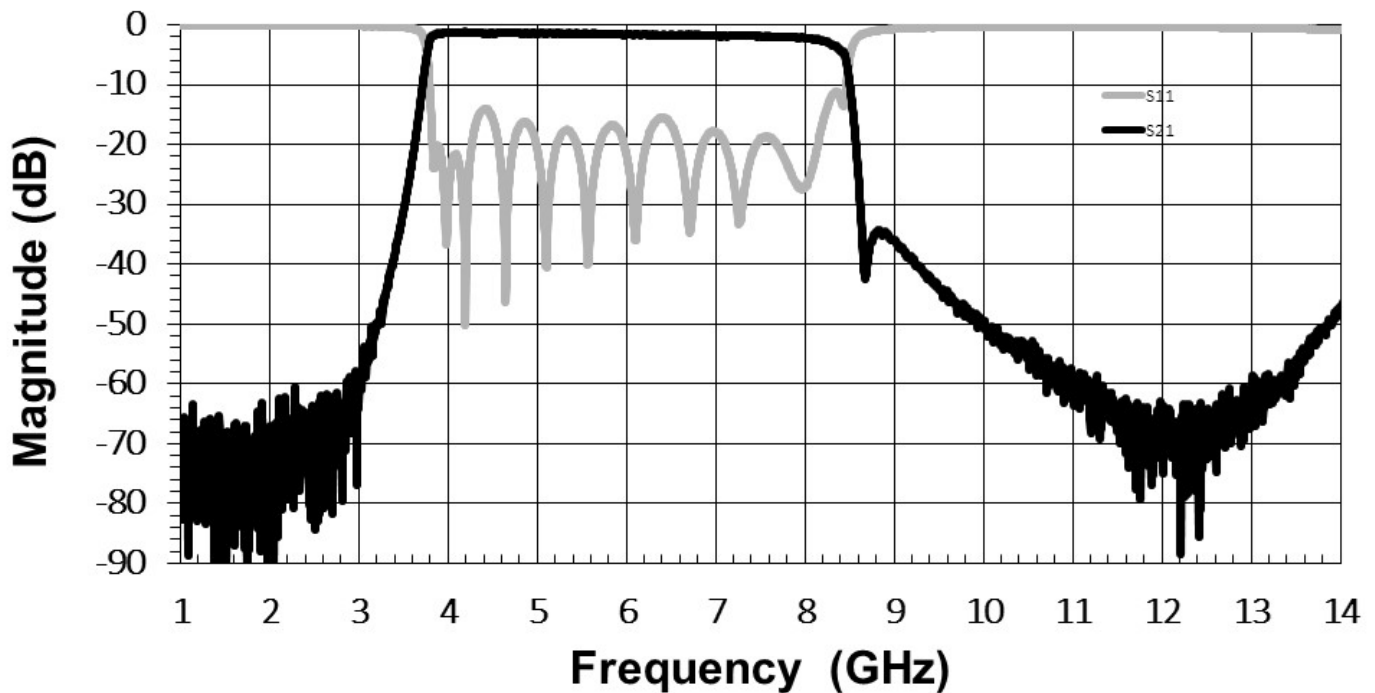
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	4.0 - 8.0			2.5
Return Loss (dB)		14	17	
Low Side Rejection (dB)	DC - 3.0	40	50	
High Side Rejection (dB)	9.5 - 12	40	43	
CW Input Power** (W)	4.0 - 8.0			15
$\theta_{jc} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$	5			
Size (L x W x H)	0.450 x 0.230 x 0.103 in 11.43 x 5.84 x 2.62 mm			

*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ± 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.

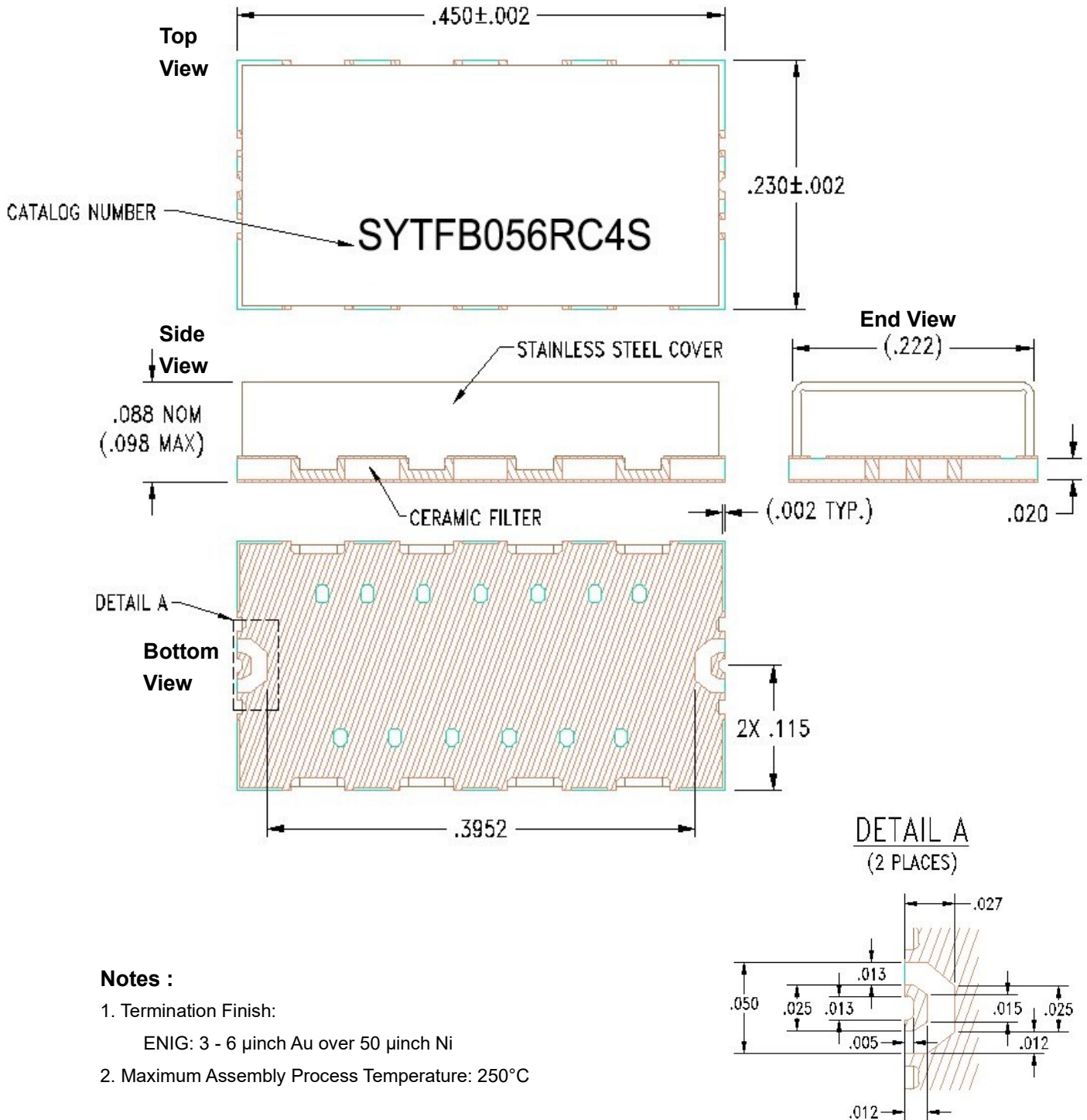
Typical Measured Performance



*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.

Physical Dimensions

Units = inches



Notes :

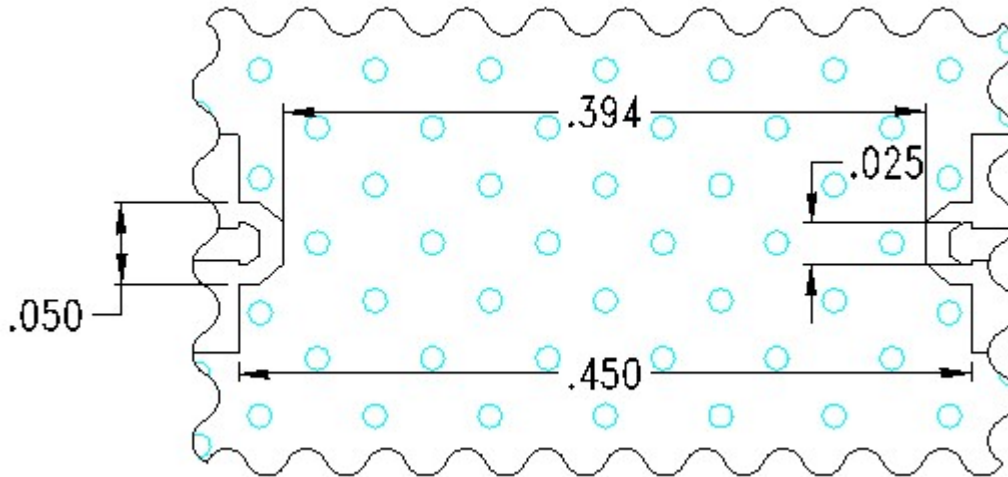
- Termination Finish:
ENIG: 3 - 6 μinch Au over 50 μinch Ni
- Maximum Assembly Process Temperature: 250°C

Tolerances:

For values with 3 decimal places ± 0.001

For values with 4 decimal places ± 0.0005

Recommended PCB Layout



Units = inches

Note:

- 50Ω trace dimensions are application specific.
- Ensure adequate grounding beneath the part.
- Trace feed locations can be horizontal, vertical or angled.