

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

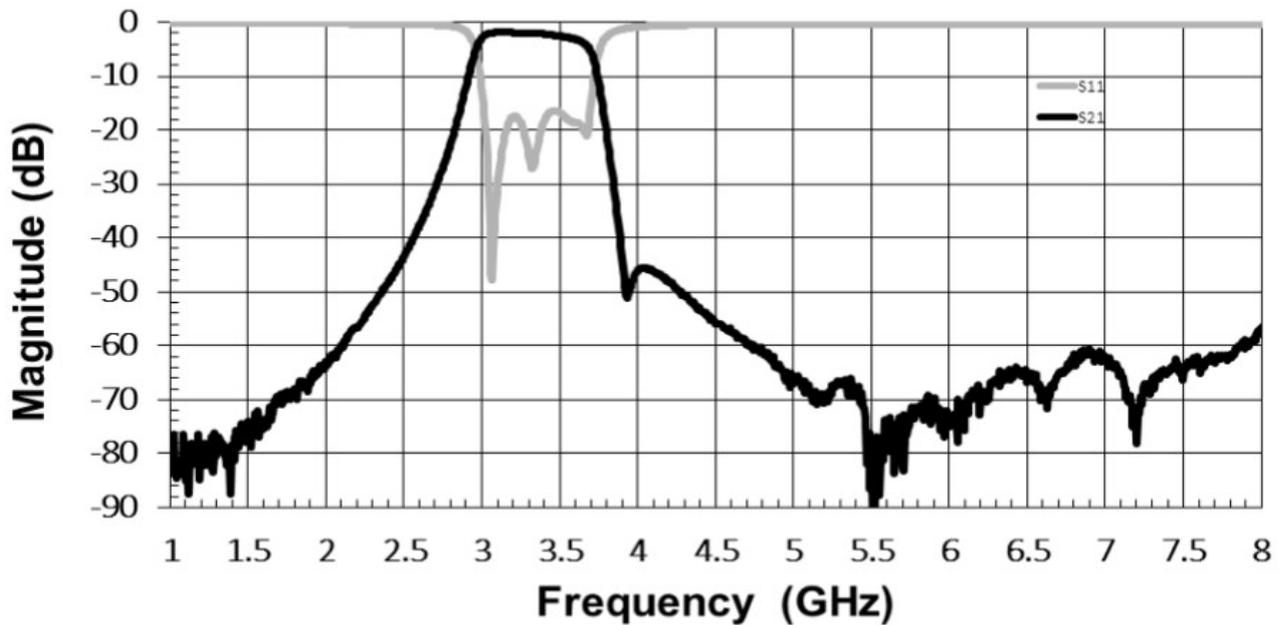
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	3.1 - 3.5		2.0	3.2
Return Loss (dB)		9.5	15.0	
Low Side Rejection (dB)	DC - 2.25	30.0	40.0	
High Side Rejection (dB)	4.0 - 6.0	40.0	45.0	
CW Input Power** (W)				15
$\theta_{jc} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$	5			
Size (L x W x H)	9.98 x 8.97 x 3.51 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.

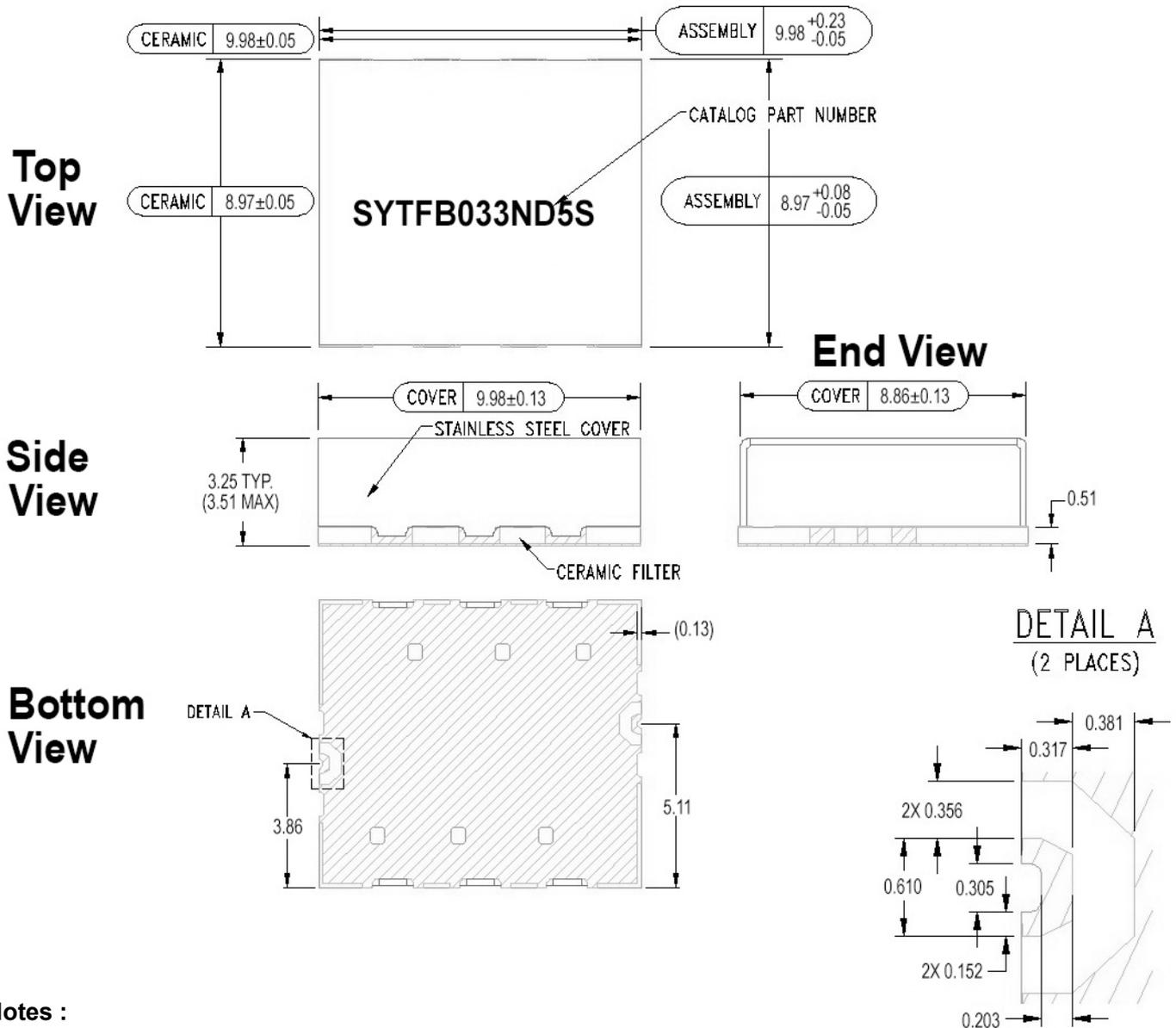
Typical Measured Performance



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

Physical Dimensions

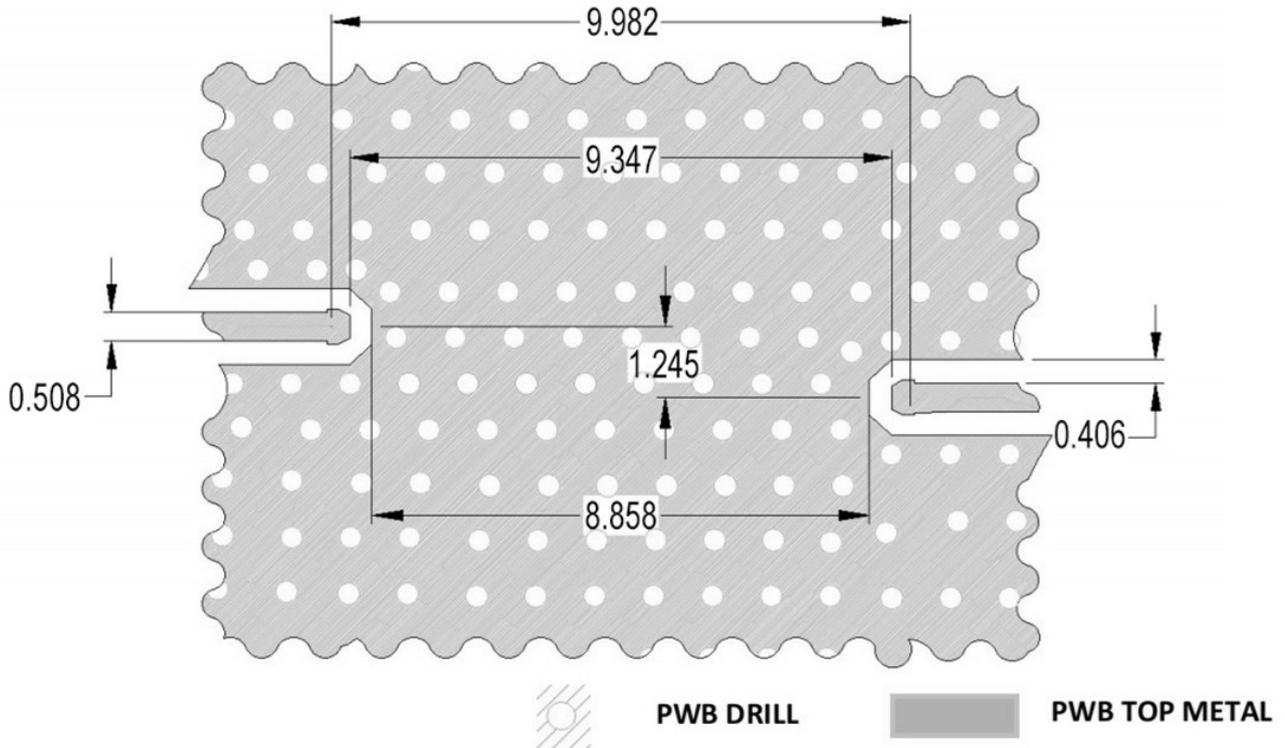
Units = mm



Notes :

1. Termination Finish:
ENIG: 76-152 μm Au over 1270 μm Ni
2. Maximum Assembly Process Temperature: 250°C
3. Dimension tolerance: ±0.05

Recommended PCB Layout



PCB RECOMMENDED STACKUP

Filter is matched to RF layer stackup seen below

Dimensions are specified below in mm (not to scale)

- Board material : RO4350b
- Board material design dk : 3.66
- CPWG : 0.51mm trace width, 0.38mm gaps

