

# SYTFB031ND5S 3.125GHz Surface Mount Bandpass Filter

### 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.

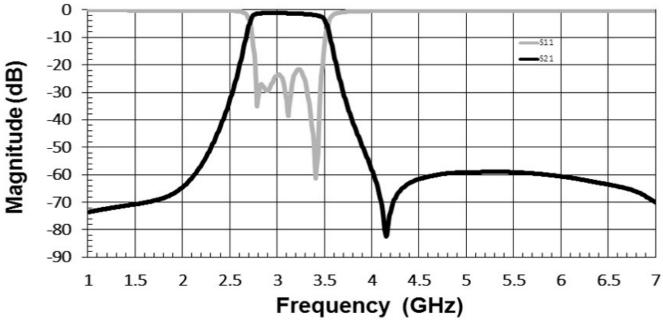
#### Features

- 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

Parameter	Frequency Range (GHz)	Min	Тур.	Max
Insertion Loss (dB)	2.9 - 3.33		3.0	3.5
Return Loss (dB)		9.5	10.0	
Low Side Rejection (dB)	DC - 2.4		40.0	
High Side Rejection (dB)	3.85 - 7.0		40.0	
CW Input Power** (W)				10
$\theta_{JC} \left(\frac{^{\circ}C}{W}\right)$	7.5			
Size (L x W x H)	12.70 x 6.35 x 2.87 mm			

\*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ±0.5dB 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.



Specifications\*

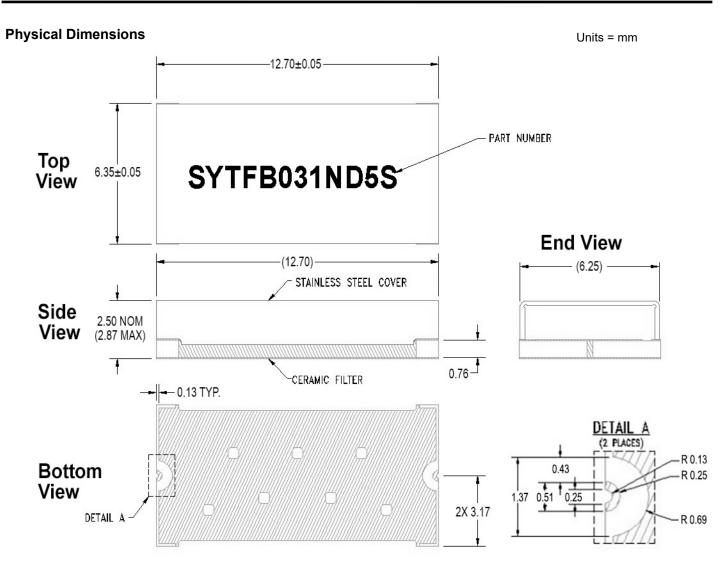
Typical Measured Performance

\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.00hm CPW ground traces going into the ports at room temperature.



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#### Notes :

1. Termination Finish:

ENIG: 76-152 µm Au over 1270 µm Ni

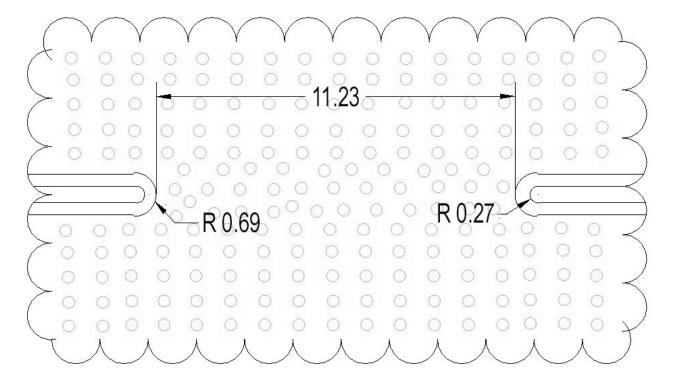
2. Maximum Assembly Process Temperature: 250°C

3.Dimension tolerance: ±0.05



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## **Recommended PCB Layout**



## Note:

Unit = mm

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