

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

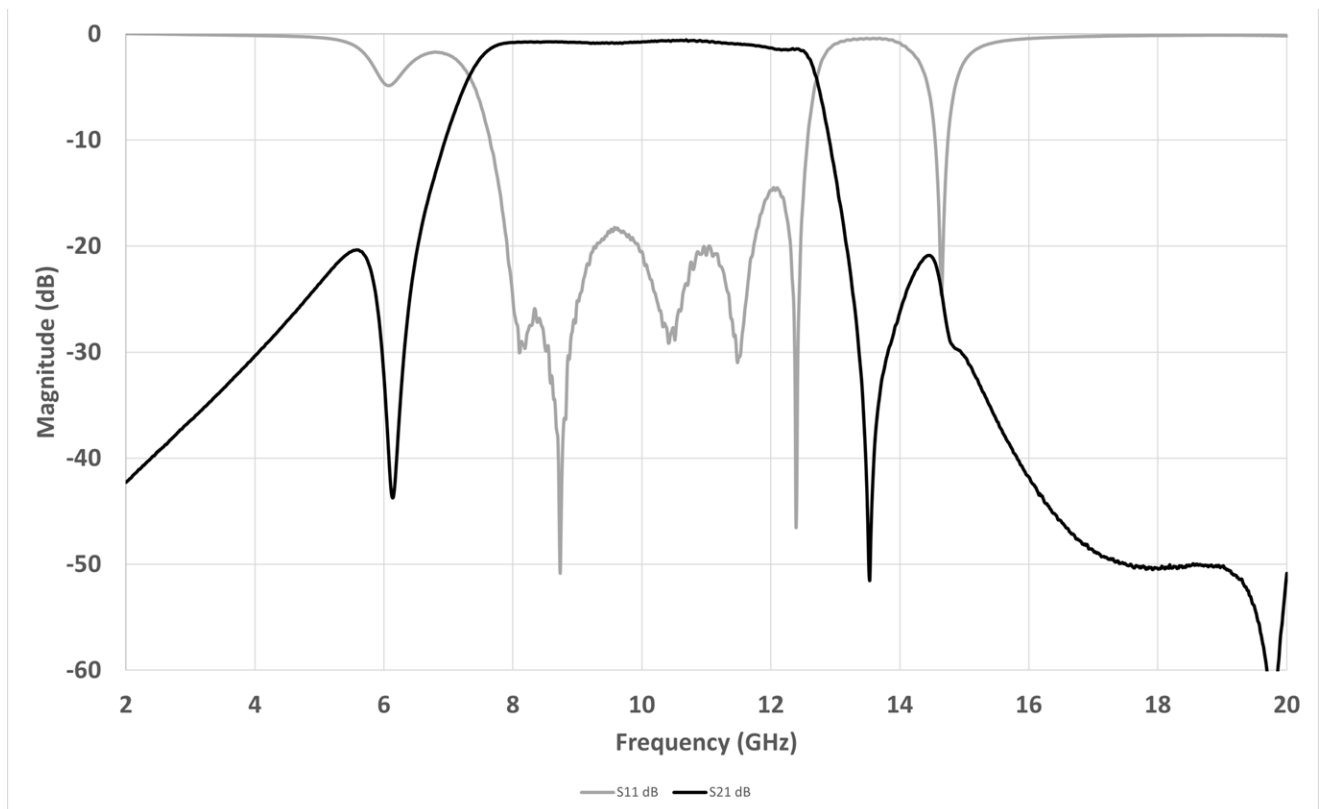
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	8.0 - 12.0		0.75	1.0
Return Loss (dB)		10.0	12.0	
Low Side Rejection (dB)	2.0 - 6.0	20.0	25.0	
High Side Rejection (dB)	16.0 - 20.0	20.0	25.0	
CW Input Power** (W)				10
$\theta_{JC} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$	7.5			
Size (L x W x H)	9.53 x 5.72 x 2.24 mm			

*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary $\pm 0.5\text{dB}$ 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.

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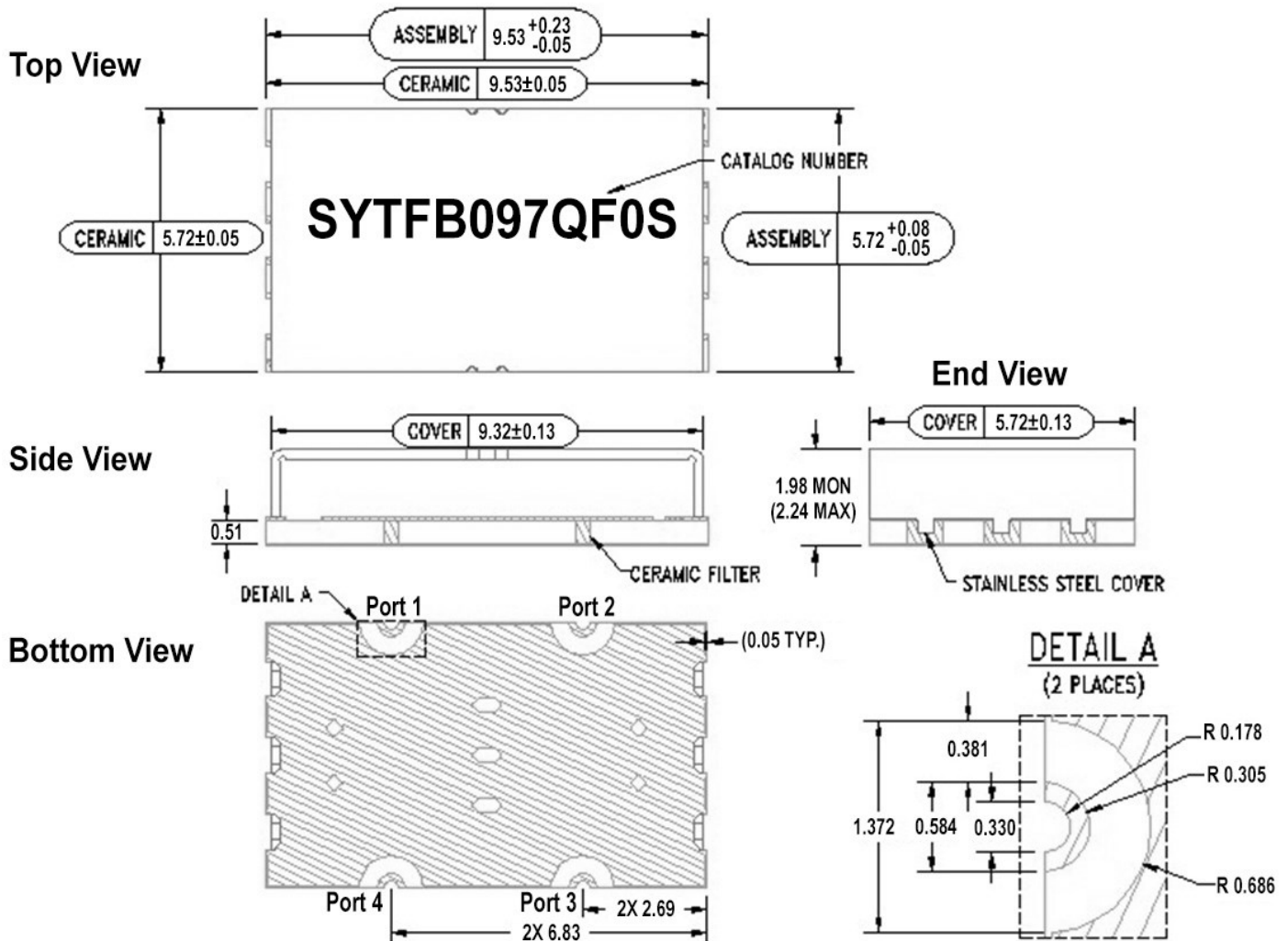
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Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

Physical Dimensions

Units = mm



Notes :

- Termination Finish:
ENIG: 76-152 μ m Au over 1270 μ m Ni
- Maximum Assembly Process Temperature: 250°C
- Dimension tolerance: ± 0.05

Differential Filter Port Configurations

This part is symmetrical and will function the same

	Input 1	Output 1	Input 2	Output 2
Option 1	Port 1	Port 4	Port 2	Port 3
Option 2	Port 3	Port 2	Port 4	Port 1

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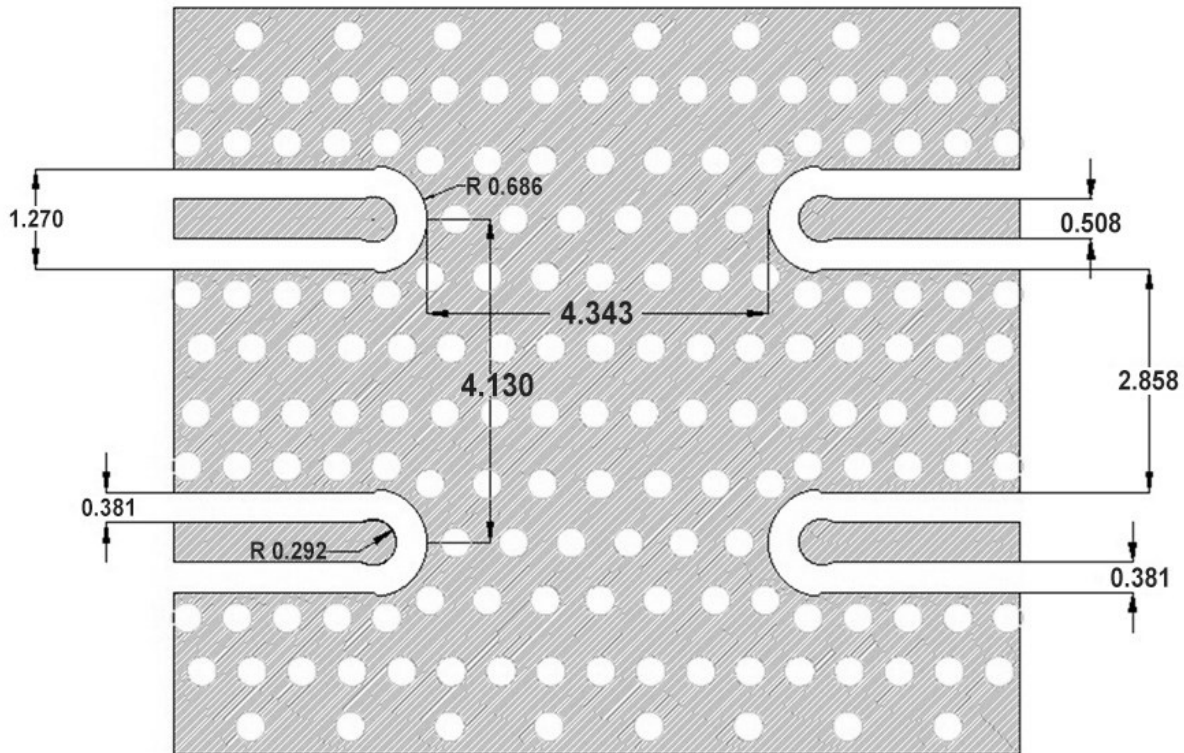
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Recommended PCB Layout

Unit = mm



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



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