SYTFB052NC5S

5.20GHz 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

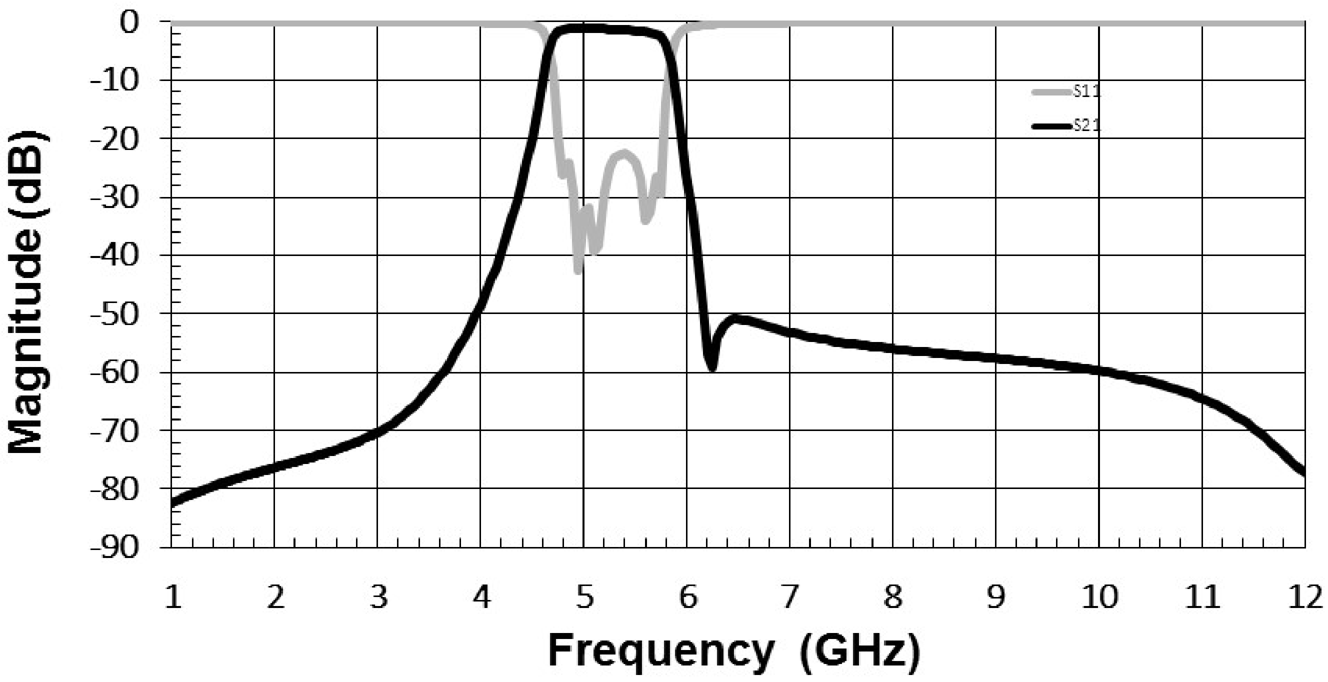
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	4.8 - 5.6		2.25	2.5
Return Loss (dB)			10.0	12.0
Low Side Rejection (dB)	DC - 3.5		40.0	45.0
High Side Rejection (dB)	6.2 - 12.5		40.0	45.0
CW Input Power** (W)				15
$\theta_{JC}\left(\frac{°C}{W}\right)$	5			
Size (L x W x H)	8.89 x 5.08 x 2.50 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.

Typical Measured Performance



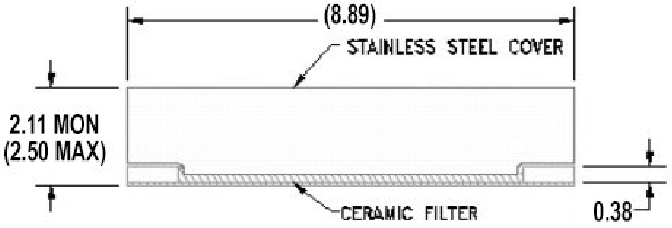
***Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.**

Physical Dimensions

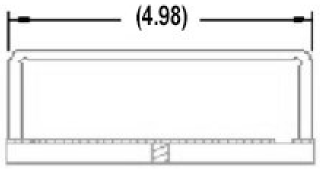
Units = mm

Top View

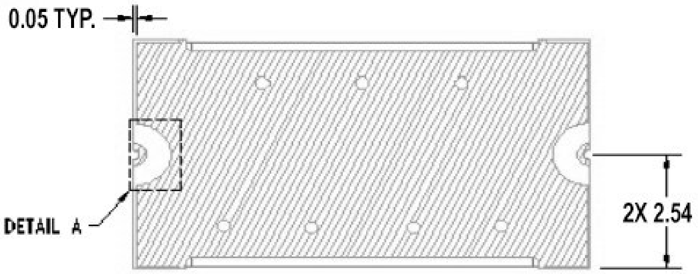
Side View



End View

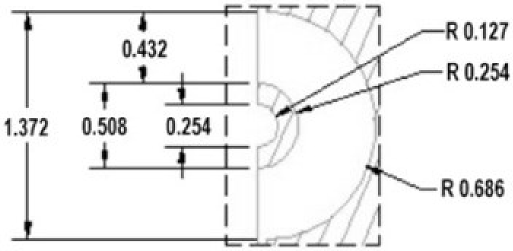


Bottom View



DETAIL A

(2 PLACES)



Notes :

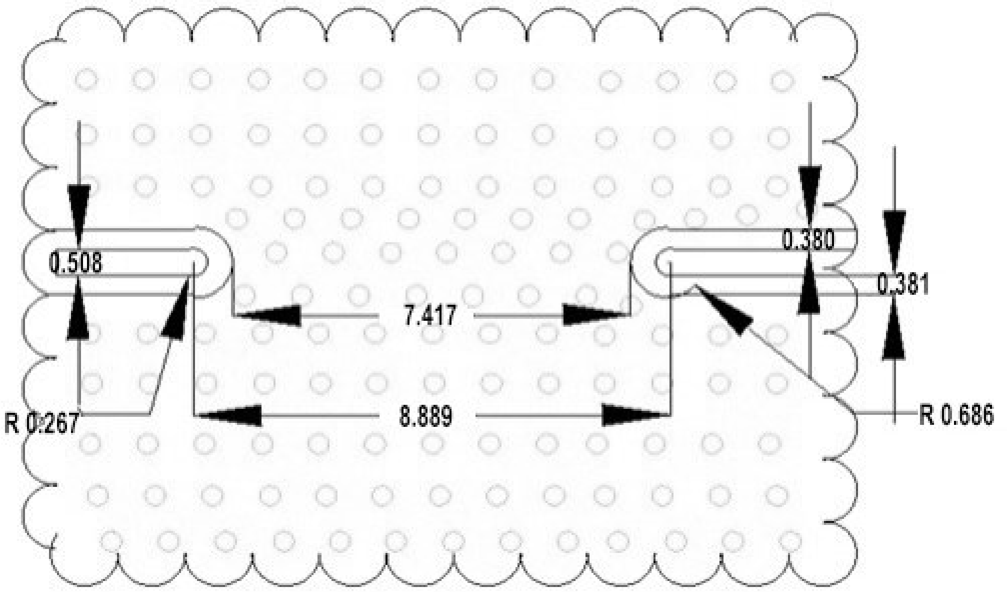
1. Termination Finish:

   ENIG: 76-152 μm Au over 1270 μm Ni

2. Maximum Assembly Process Temperature: 250°C

3.Dimension tolerance: ±0.05

Recommended PCB Layout



Units = mm

Note:

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