

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

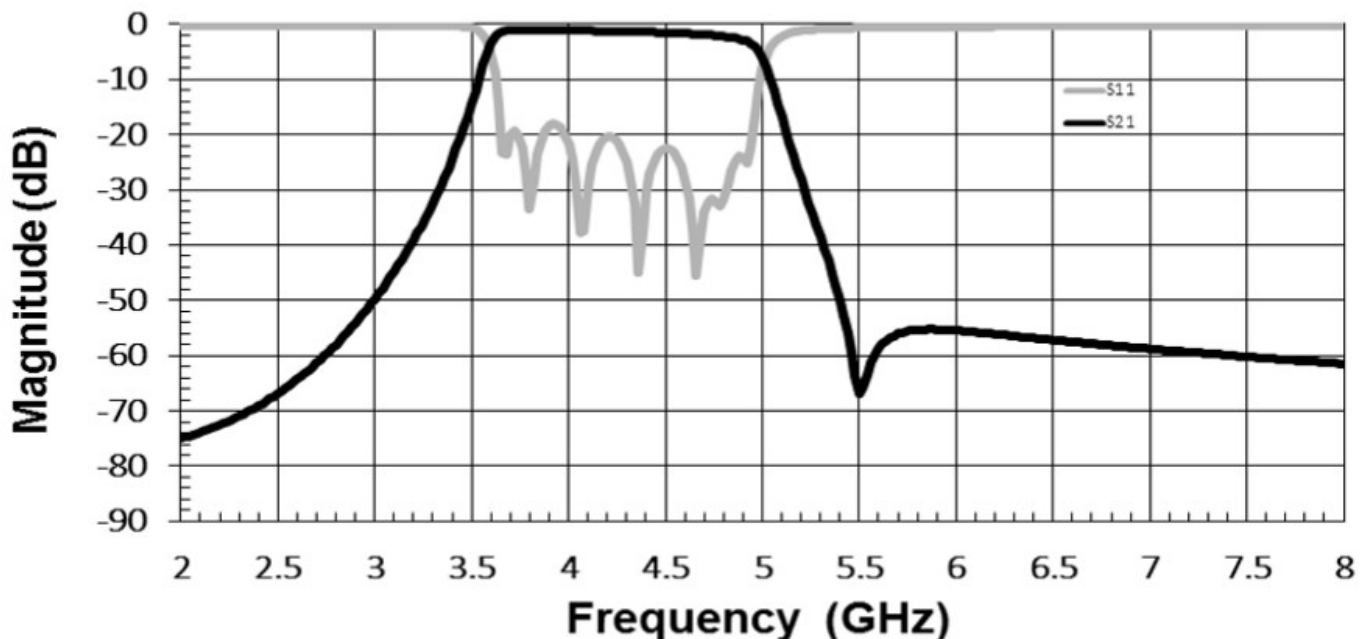
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	3.75 - 4.75		3.0	3.5
Return Loss (dB)			12.0	15.0
Low Side Rejection (dB)	DC - 3.0		40.0	45.0
High Side Rejection (dB)	5.6 - 10.0		40.0	50.0
CW Input Power** (W)				10
$\theta_{JC} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$	7.5			
Size (L x W x H)	12.7 x 6.35 x 2.79 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 50.0Ω CPW ground traces going into the ports at room temperature.

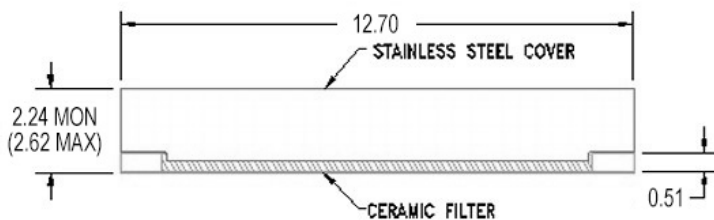
Physical Dimensions

Units = mm

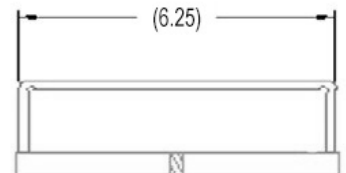
Top View



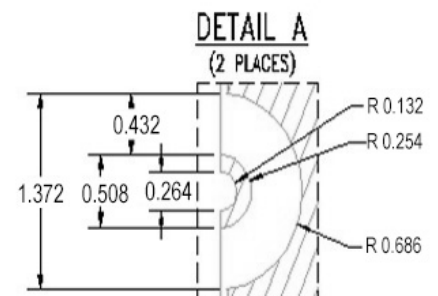
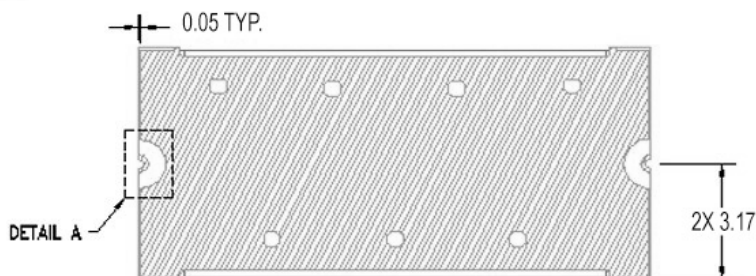
Side View



End View



Bottom View



Notes :

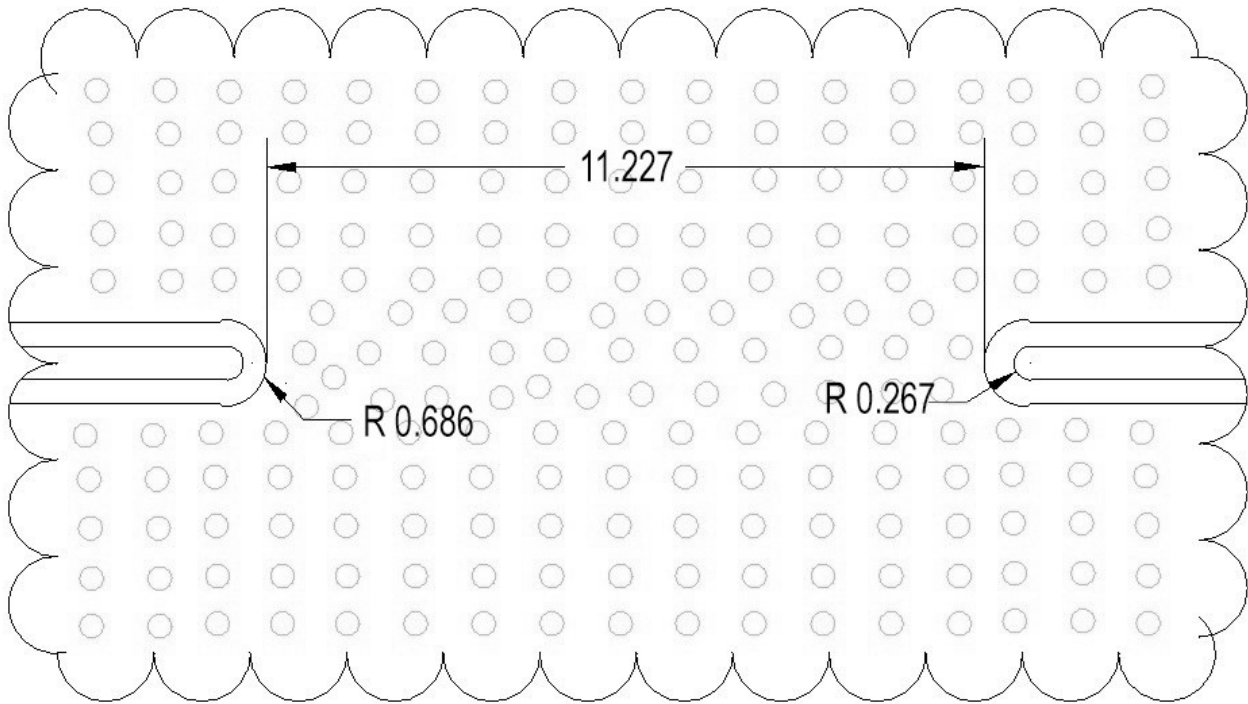
1. Termination Finish:

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:

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