

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

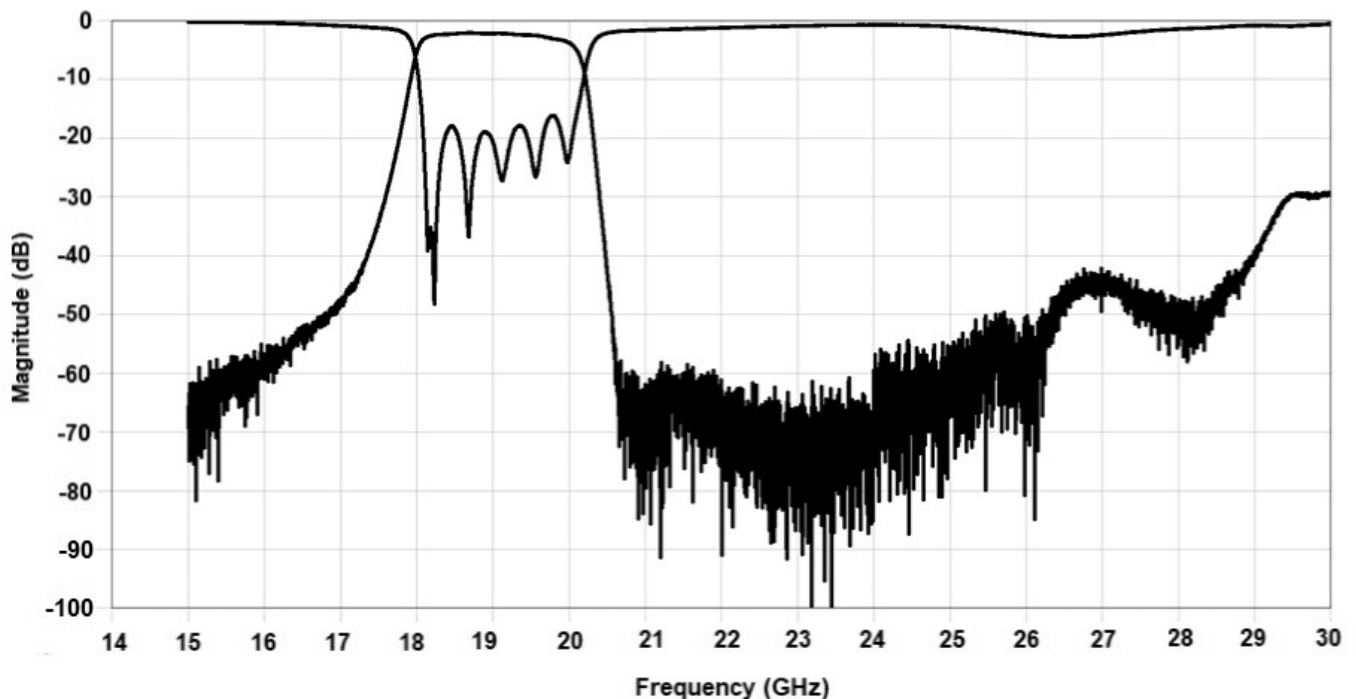
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	18.5 - 19.5		2.5	3.0
Return Loss (dB)		10.0	20.0	
Low Side Rejection (dB)	DC - 17.0	40.0	48.0	
High Side Rejection (dB)	20.7 - 28.0	40.0	50.0	
CW Input Power** (W)				5
$\theta_{JC} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$	15			
Size (L x W x H)	11.43 x 4.45 x 2.36 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.

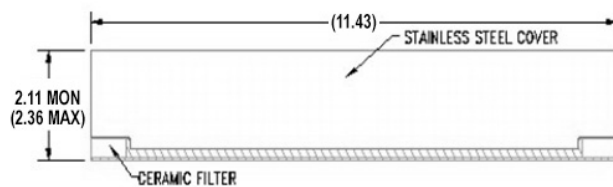
Physical Dimensions

Units = mm

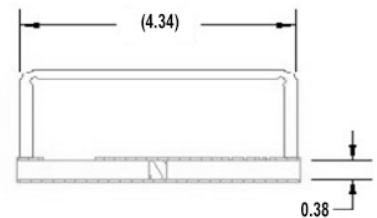
Top View



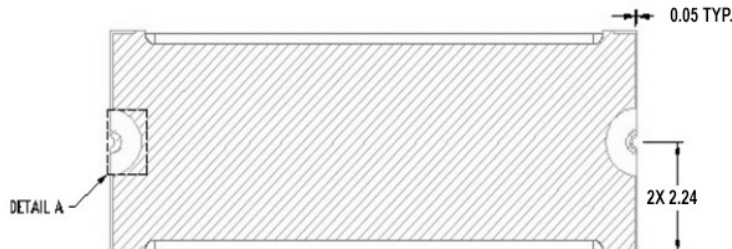
Side View



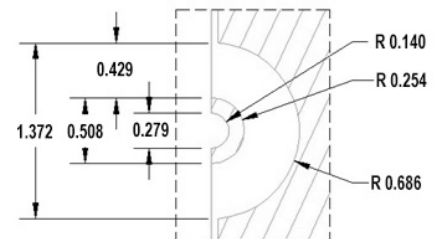
End View



Bottom View



DETAIL A (2 PLACES)



Notes :

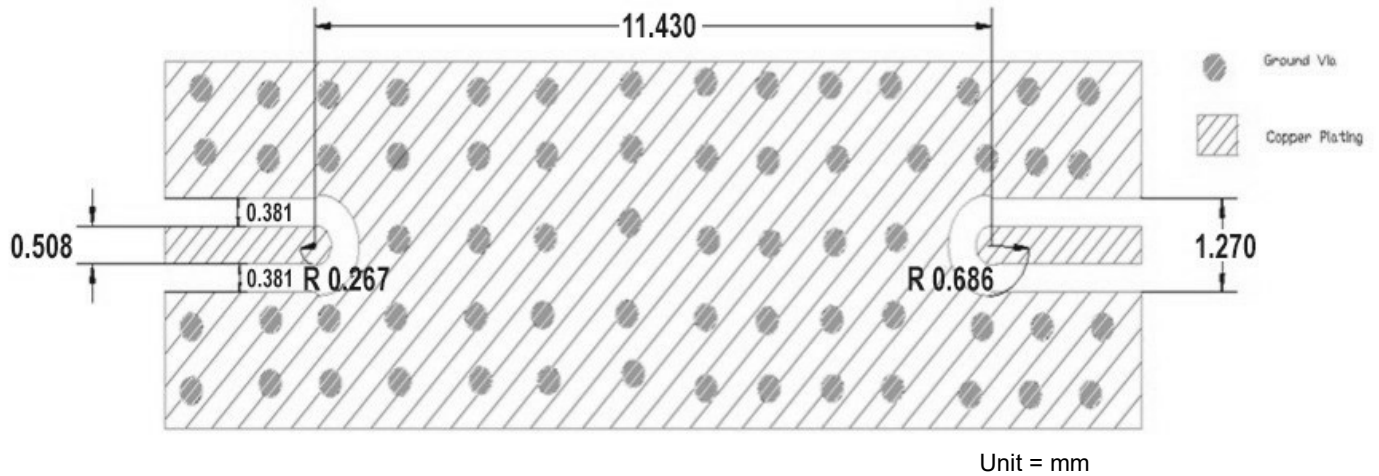
1. Termination Finish:

ENIG: 76-152 μm Au over 1270 μm Ni

2. Maximum Assembly Process Temperature: 250°C

3. Dimension tolerance: ± 0.05

Recommended PCB Layout



Note:

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