

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

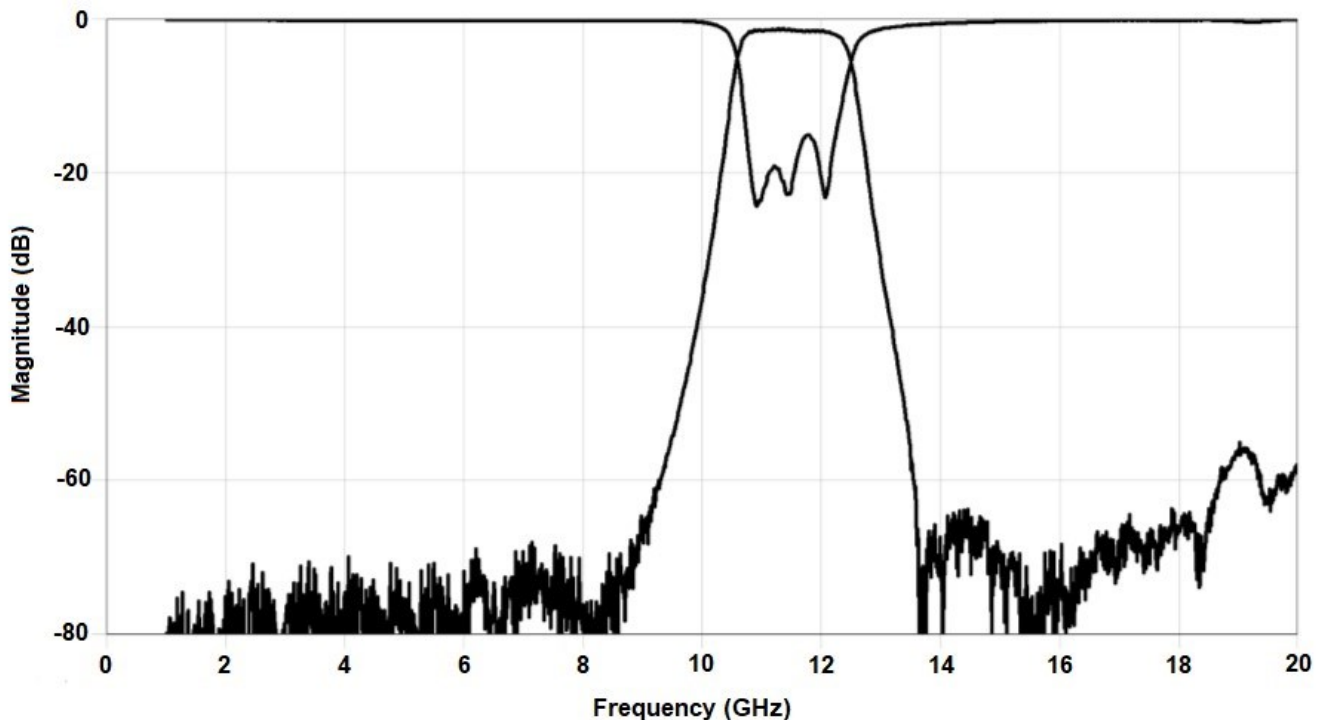
Specifications*

| Parameter | Frequency Range (GHz) | Min | Typ. | Max |
|--|---|------|------|------|
| Insertion Loss (dB) | 10.75 - 11.75 | | 2.5 | 2.75 |
| Return Loss (dB) | | 9.5 | 12.0 | |
| Low Side Rejection (dB) | DC - 9.4 | 45.0 | 50.0 | |
| High Side Rejection (dB) | 13.25 - 20.0 | 40.0 | 45.0 | |
| CW Input Power** (W) | | | | 10 |
| $\theta_{jc} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$ | 7.5 | | | |
| Size (L x W x H) | 0.400 x 0.150 x 0.090 in 10.16 x 3.81 x 2.286 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 50.00ohm CPW ground traces going into the ports at room temperature.

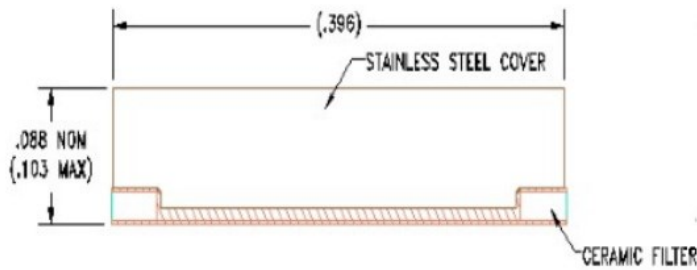
Physical Dimensions

Units = inches

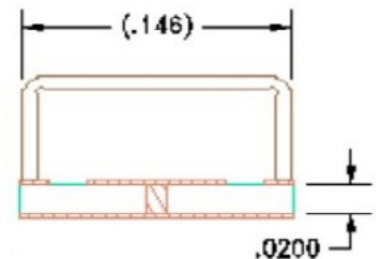
Top View



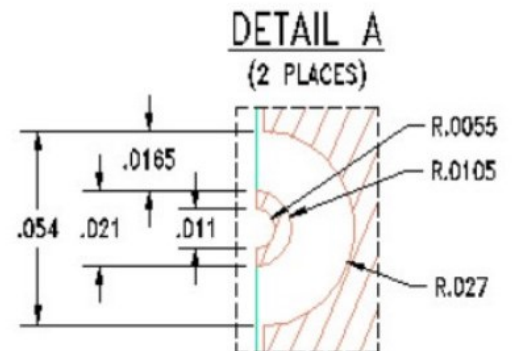
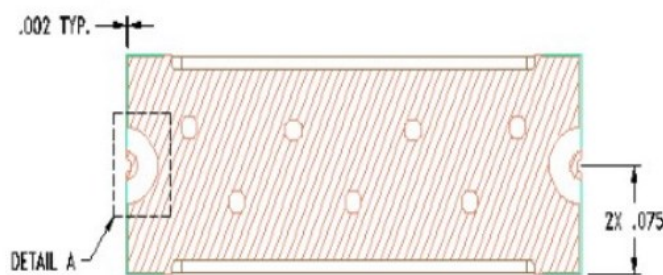
Side View



End View



Bottom View



Notes :

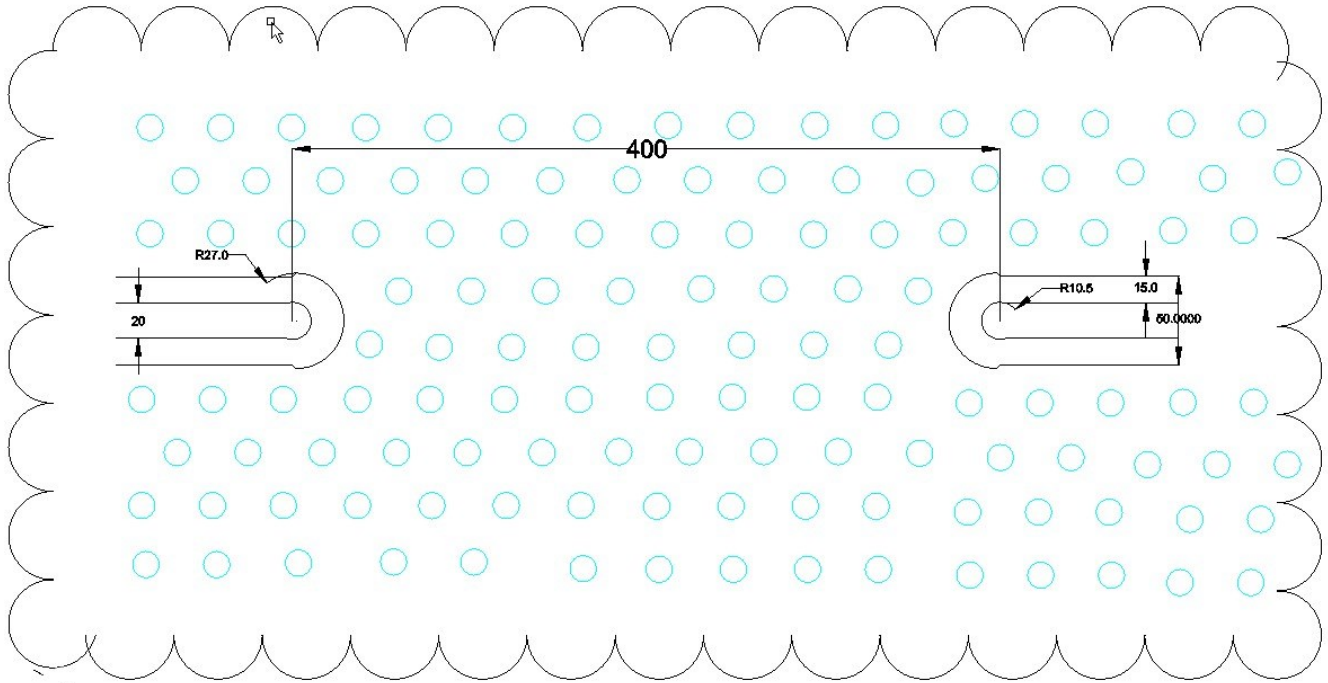
1. Termination Finish:
ENIG: 3 - 6 μinch Au over 50 μinch Ni
2. Maximum Assembly Process Temperature: 250°C

Tolerances:

For values with 3 decimal places ±0.001

For values with 4 decimal places ±0.0005

Recommended PCB Layout



Unit =mils

Note:

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