

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

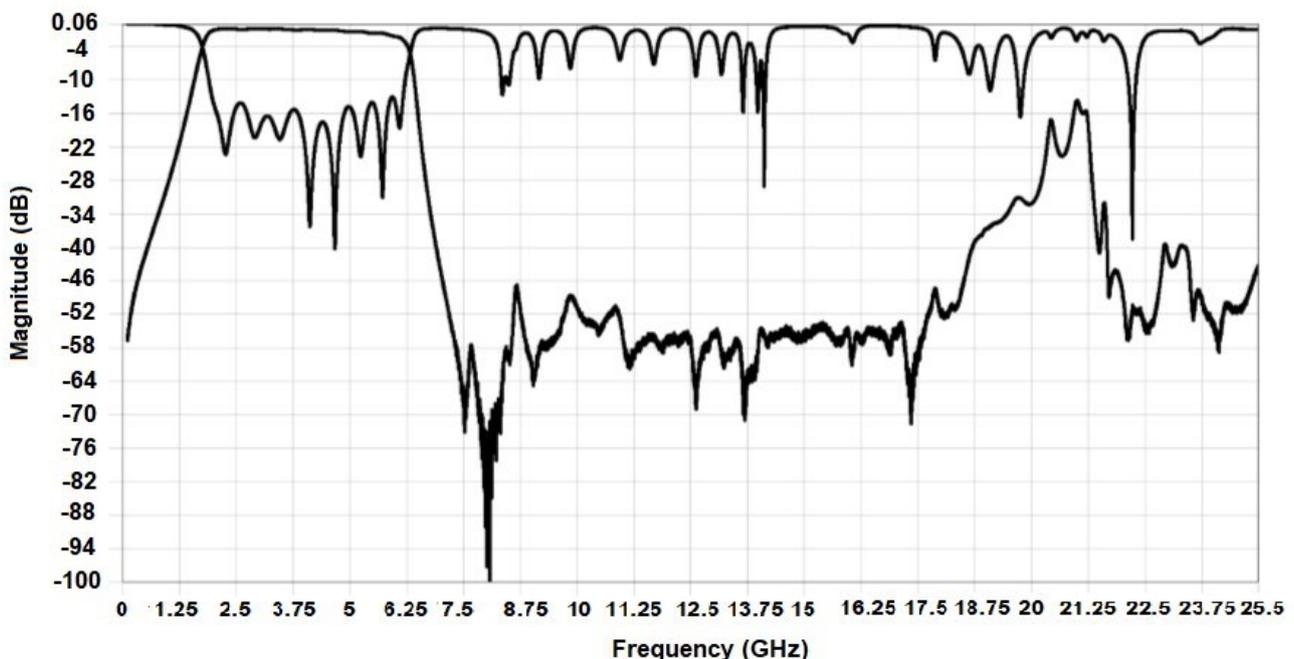
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	2.0 - 6.0		2.0	2.5
Return Loss (dB)		12.0	14.0	
Low Side Rejection (dB)	DC - 0.4	40.0	45.0	
High Side Rejection (dB)	7.5 - 18.0	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)	0.620 x 0.280 x 0.093 in 15.75 x 7.11 x 2.36 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.

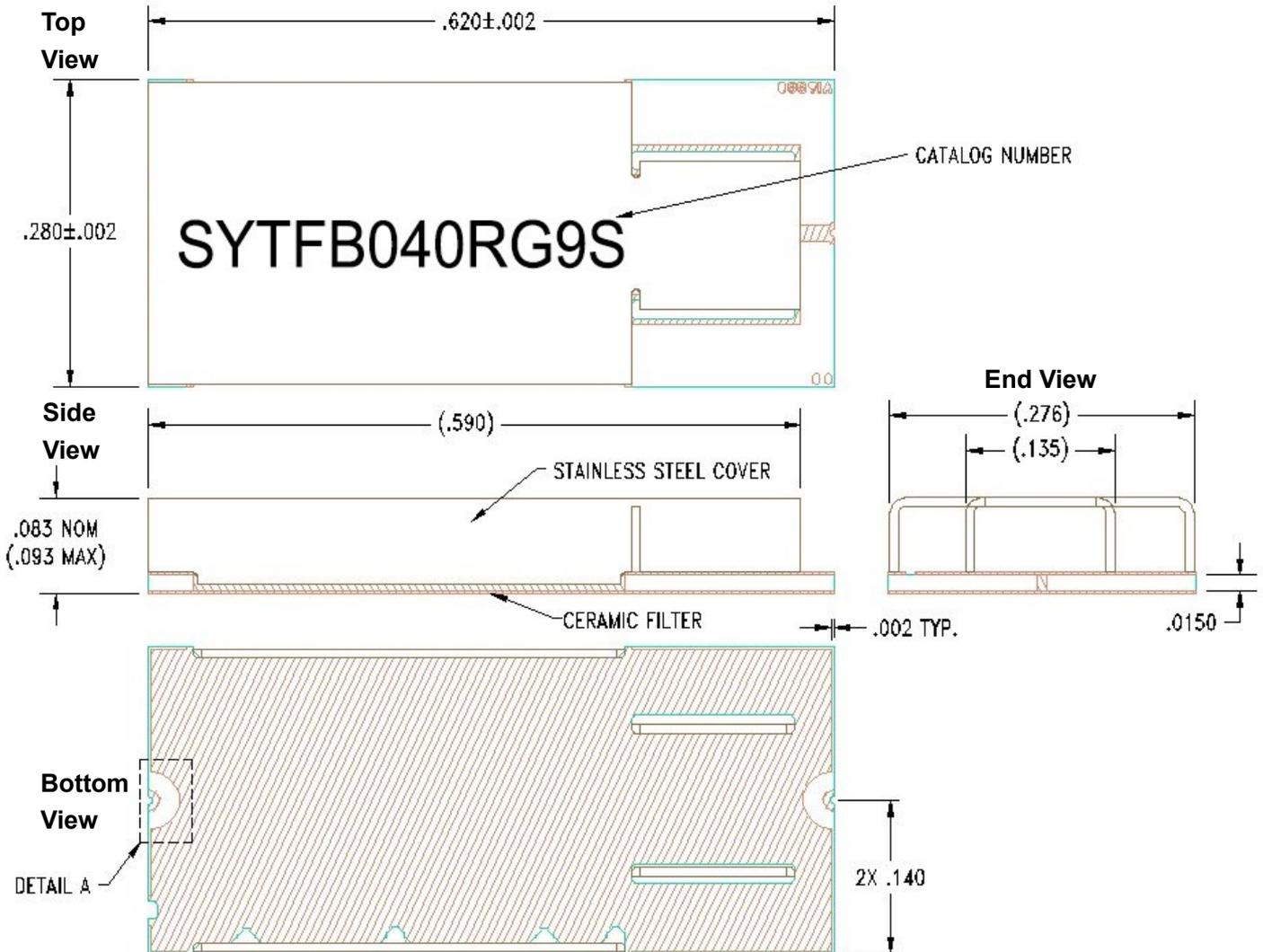
Typical Measured Performance



*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



Notes :

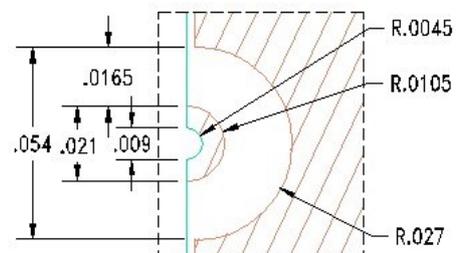
1. Termination Finish:
ENIG: 3 - 6 μinch Au over 50 μinch Ni
2. Maximum Assembly Process Temperature: 250°C

Tolerances:

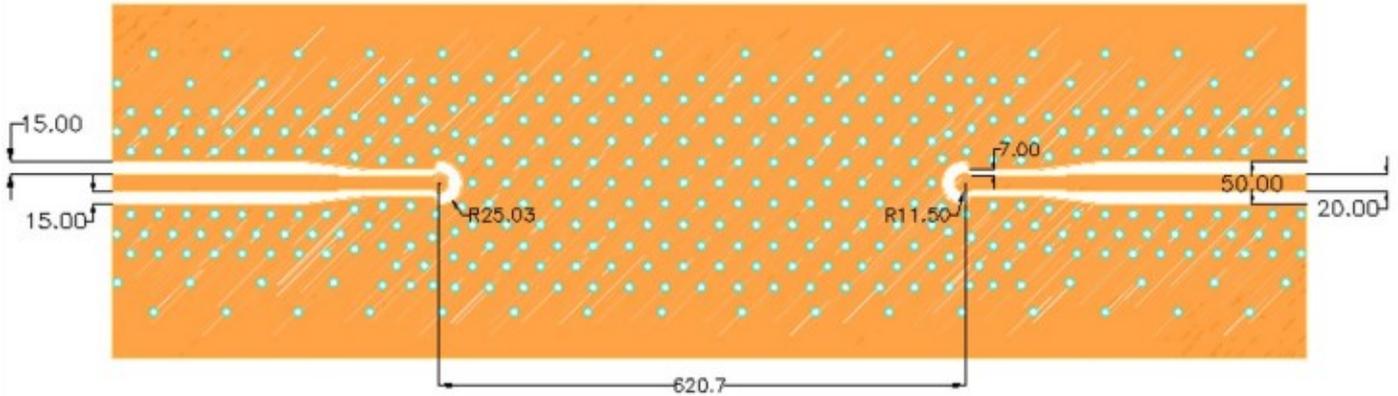
For values with 3 decimal places ± 0.001

For values with 4 decimal places ± 0.0005

DETAIL A (2 PLACES)



Recommended PCB Layout



Note:

- 50 Ω trace dimensions are application specific.
- 50 Ohm CPWG impedance traces with the following characteristics :
 1. 10 mils Rogers Board 4350B
 2. 20 mils RF trace width
 3. 15 mils gap between Ground and RF trace
 4. 1/2 Oz (0.7 mils) Copper plate up thickness
- Ensure adequate grounding beneath the part.

Units = mils