

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

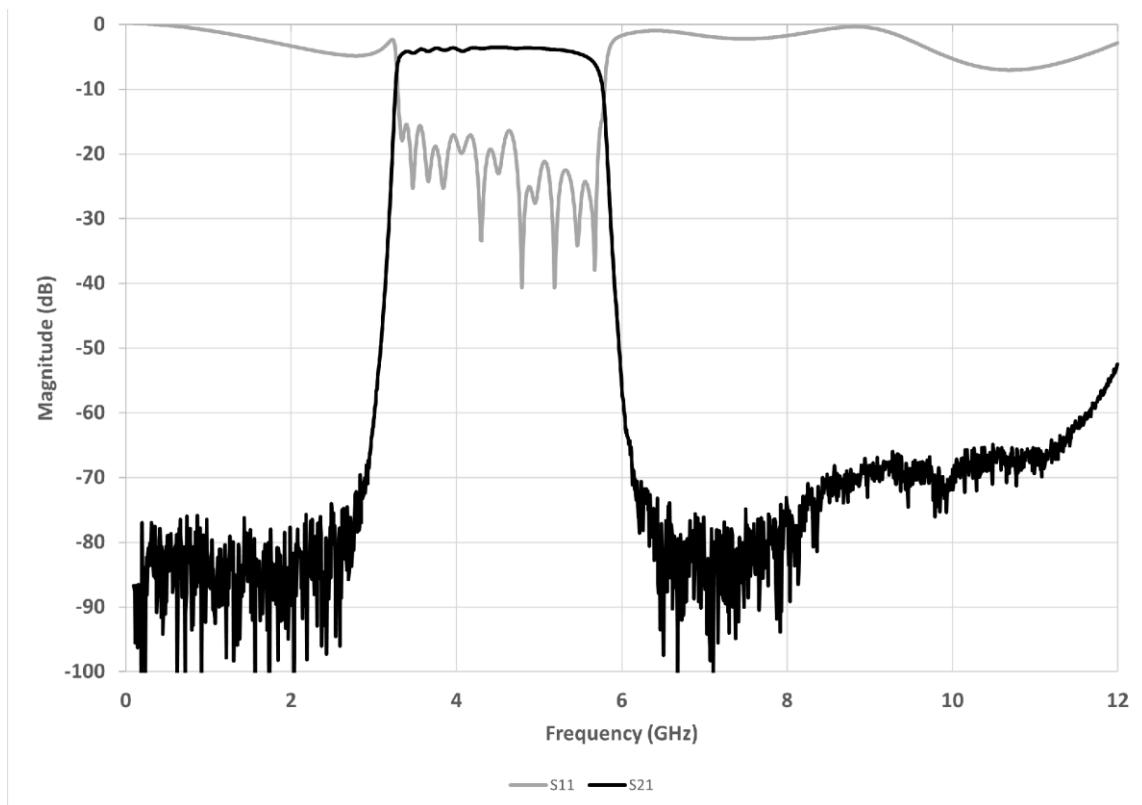
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	3.4 - 5.6		6.5	6.5
Return Loss (dB)		10.0	10.0	
Low Side Rejection (dB)	DC - 2.6	70.0	70.0	
High Side Rejection (dB)	6.4 - 11.0	60.0	70.0	
CW Input Power** (W)				15
$\theta_{JC} \left(\frac{^{\circ}C}{W} \right)$	15			
Size (L x W x H)	0.775 x 0.320 x 0.098 in 19.69 x 8.13 x 2.49 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 50.00hm CPW ground traces going into the ports at room temperature.

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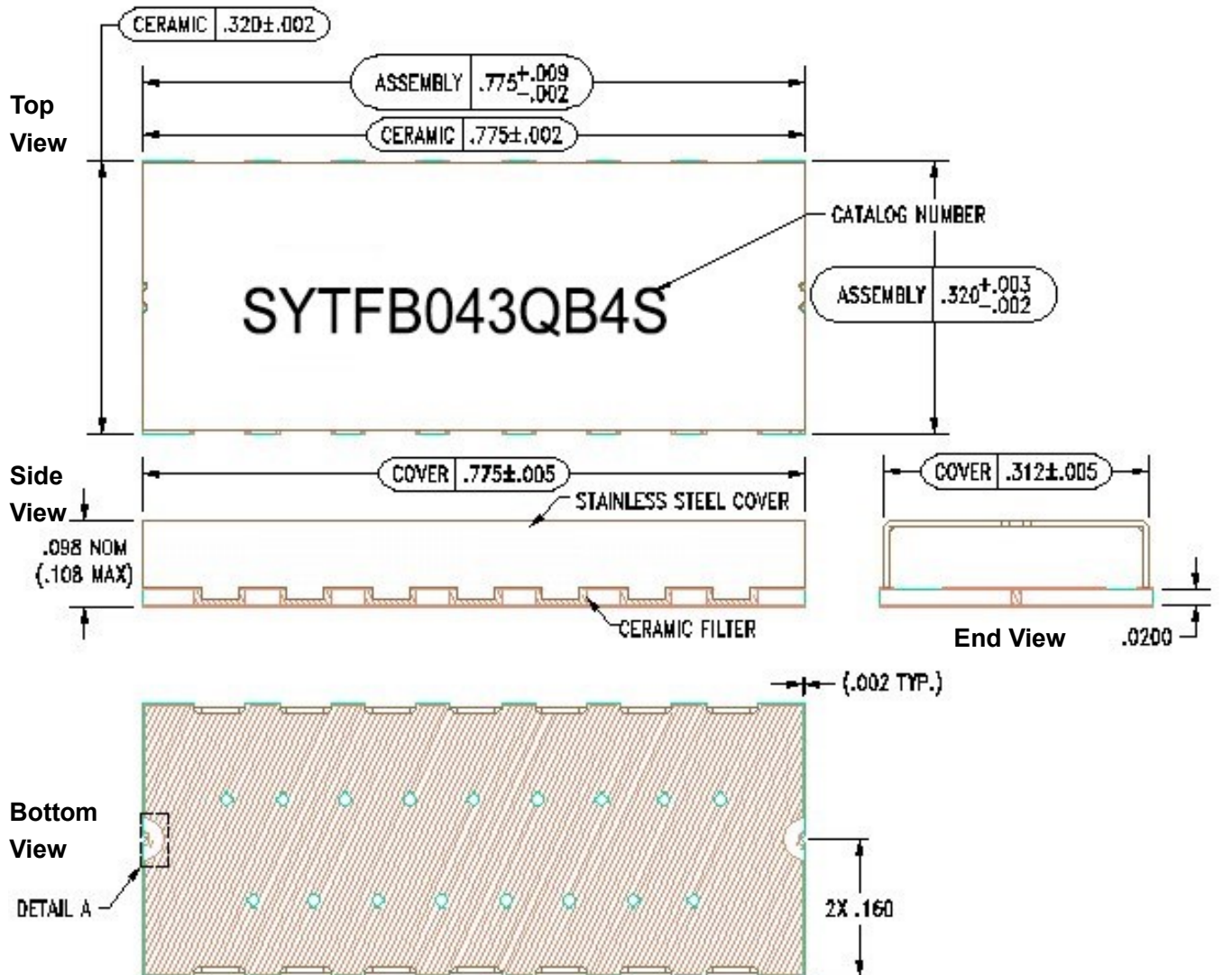
Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan Road 35,Xili Street,Nanshan,Shenzhen,China

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For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

Physical Dimensions

Units = inches



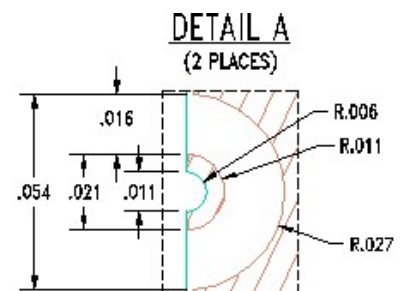
Notes :

- Termination Finish:
ENIG: 3 - 6 μ inch Au over 50 μ inch Ni

Tolerances:

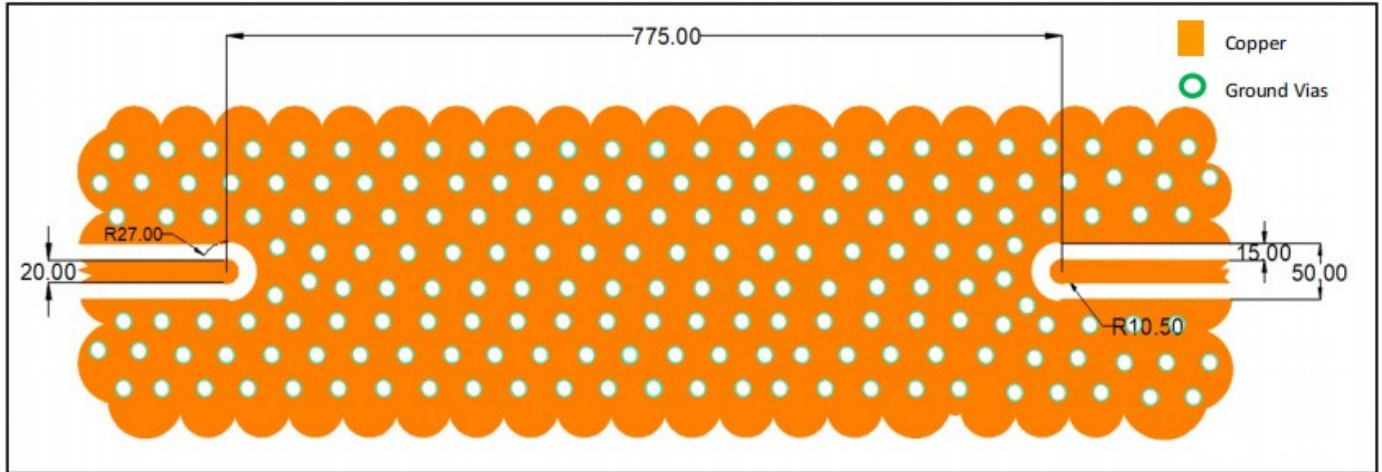
For values with 3 decimal places ± 0.001

For values with 4 decimal places ± 0.0005



Recommended PCB Layout

Units = mils

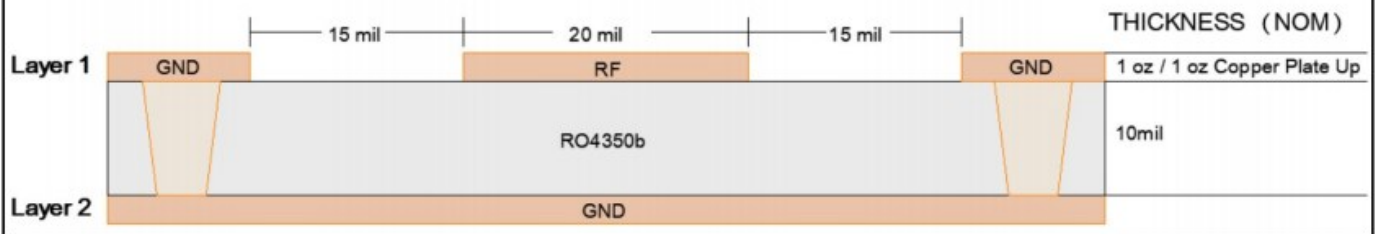


PCB RECOMMENDED STACKUP

Filter is matched to RF layer stackup seen below

Dimensions are specified below in inches (not to scale)

Board material : RO4350b
 Board material design dk : 3.66
 CPWG : 20mil trace width, 15mil gaps



Note:

- 50Ω trace dimensions are application specific.
- 50Ω trace dimensions are designed for 10mil thick R04350B Rogers Board .
- Ensure adequate grounding beneath the part.