

### 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

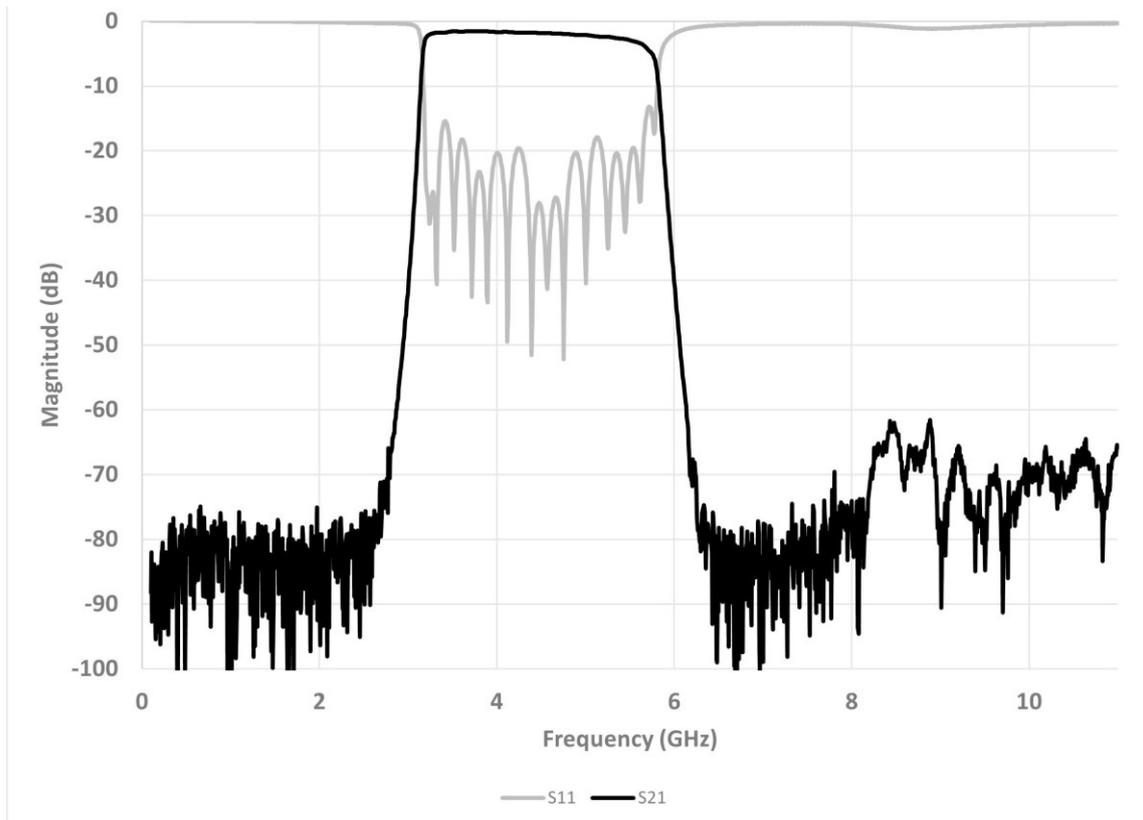
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	3.3 - 5.7		6.5	6.5
Return Loss (dB)		10.0	10.0	
Low Side Rejection (dB)	DC - 2.875	40.0	45.0	
High Side Rejection (dB)	6.25 - 11.0	40.0	45.0	
CW Input Power** (W)				10
$\theta_{JC} \left( \frac{^{\circ}C}{W} \right)$	7.5			
Size (L x W x H)	22.86 x 8.13 x 4.27 mm			

\*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary  $\pm 0.5$ 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.

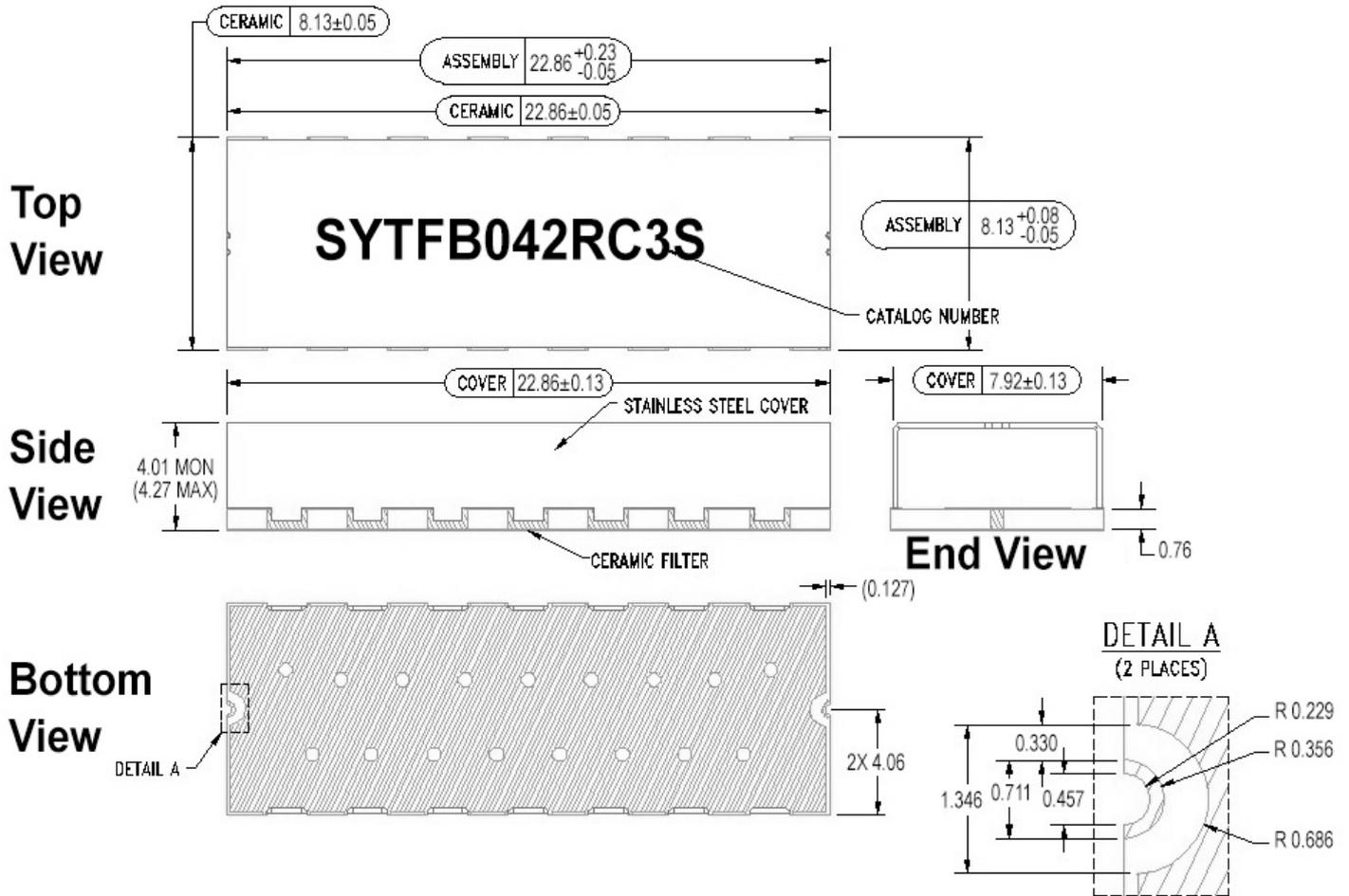
### Typical Measured Performance



\*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 = mm

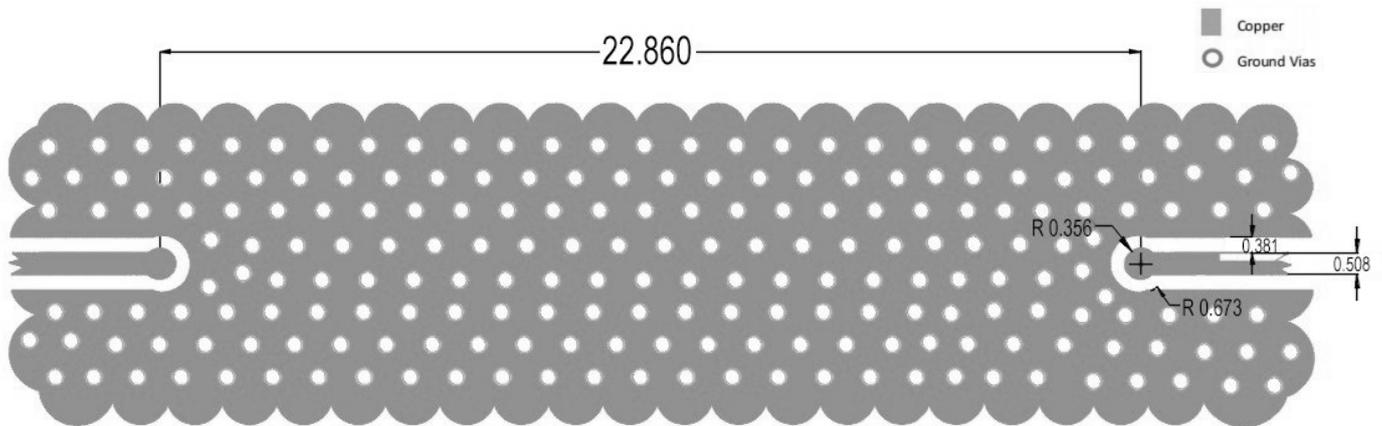


### Notes :

- Termination Finish:  
ENIG: 76-152  $\mu\text{m}$  Au over 1270  $\mu\text{m}$  Ni
- Maximum Assembly Process Temperature: 250°C
- Dimension tolerance:  $\pm 0.05$

### Recommended PCB Layout

Units = mm

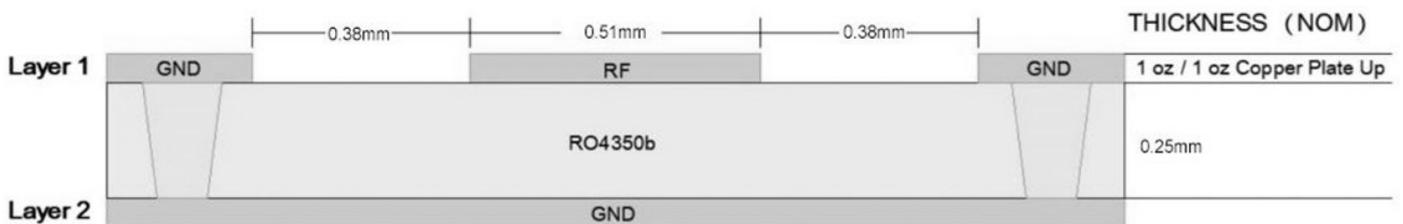


### PCB RECOMMENDED STACKUP

Filter is matched to RF layer stackup seen below

Dimensions are specified below in mm ( not to scale)

Board material	: RO4350b
Board material design dk	: 3.66
CPWG	: 0.51mm trace width,0.38mm gaps



#### Note:

- 50Ω trace dimensions are application specific.
- 50Ω trace dimensions are designed for 0.254mm thick R04350B Rogers Board .
- Ensure adequate grounding beneath the part.