

# SYTFB021MC8S

## 2.105GHz Surface Mount Bandpass Filter

### **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**

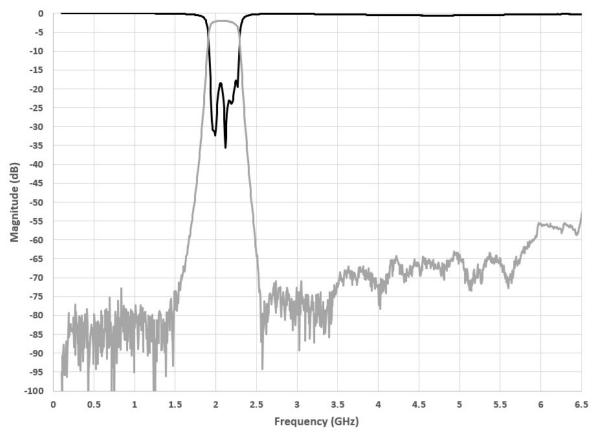
- Small Size
- Fully Shielded Component
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

### Specifications\*

Parameter	Frequency Range (GHz)	Min	Тур.	Max
Insertion Loss (dB)	2.00 - 2.21		2.6	3.0
Return Loss (dB)		10.0	15.0	12.0
Low Side Rejection (dB)	DC - 1.75	40.0	45.0	
High Side Rejection (dB)	2.45 - 6.50	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)	15.24 x 7.62 x 3.25 mm			

<sup>\*</sup>Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ±0.5dB over temperature.

## **Typical Measured Performance**



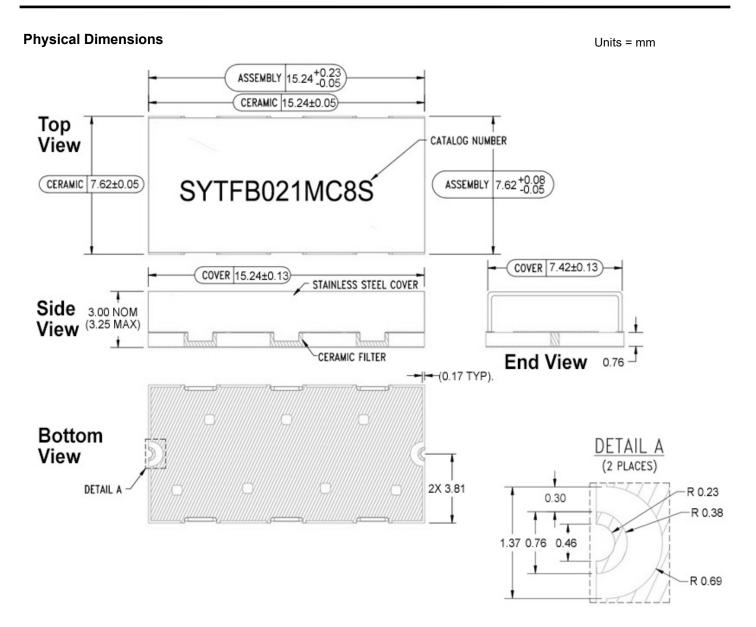
<sup>\*</sup>Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.00hm CPW ground traces going into the ports

<sup>\*\*</sup>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.



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#### Notes:

1. Termination Finish:

ENIG: 76-152 μm Au over 1270 μm Ni

2. Maximum Assembly Process Temperature: 250°C

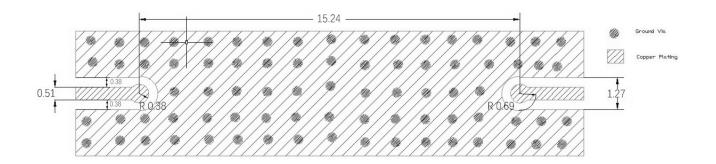
3.Dimension tolerance: ±0.05



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### **Recommended PCB Layout**



Unit = mm

#### Notes:

- ullet 50 $\Omega$  trace dimensions are application specific.
- $\bullet$   $50\Omega$  trace dimensions are designed for 10mil thick R04350B Rogers Board .
- Ensure adequate grounding beneath the part.