

### 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

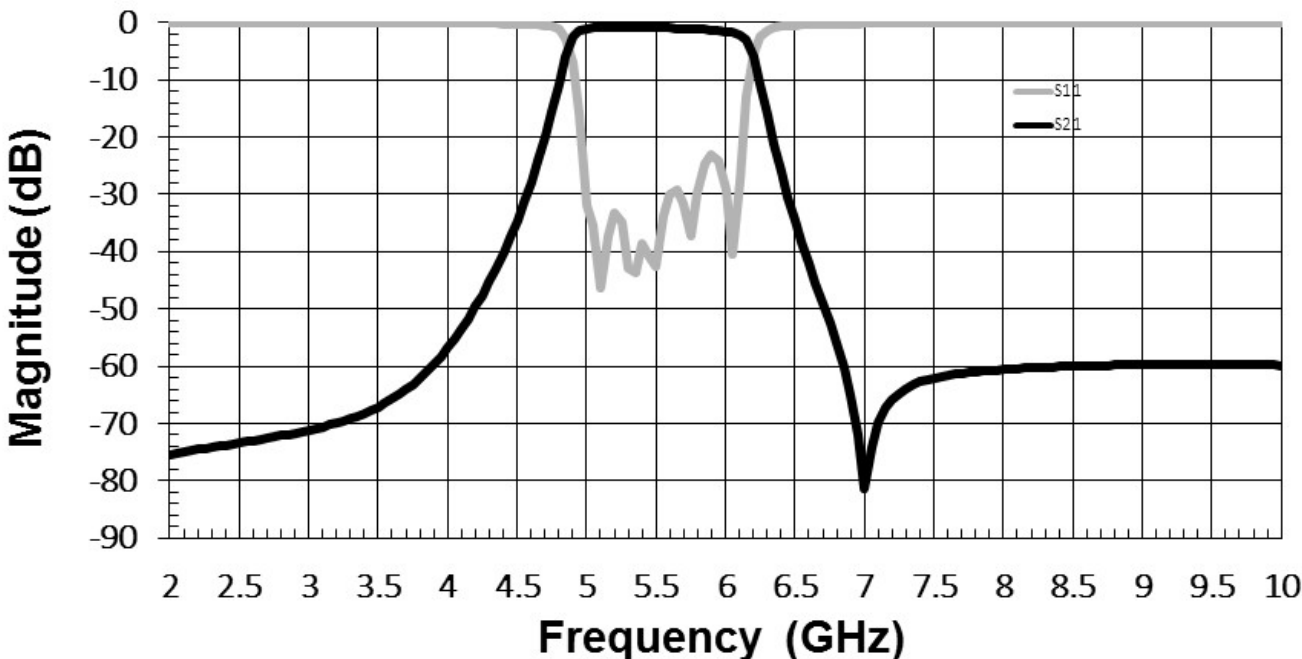
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	5.0 - 6.0	1.75	2.0	2.25
Return Loss (dB)		12.0	15.0	20.0
Low Side Rejection (dB)	DC - 4.2		40.0	45.0
High Side Rejection (dB)	6.75 - 12.0		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)	0.350 x 0.200 x 0.090 in 2.89 x 5.08 x 2.29 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

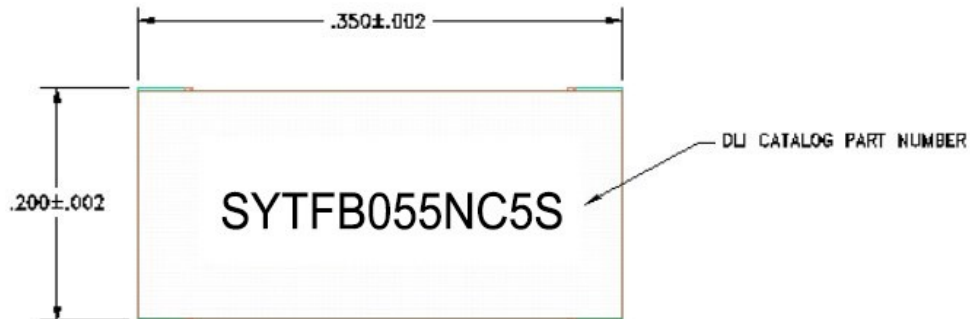


\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.00ohm CPW ground traces going into the ports at room temperature.

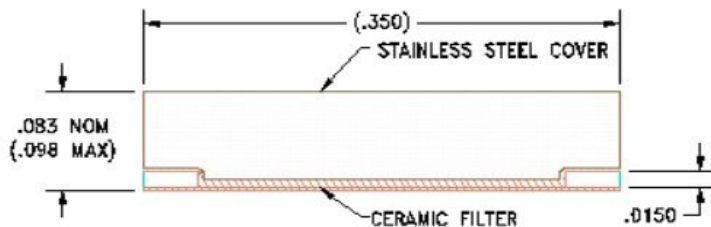
### Physical Dimensions

Units = inches

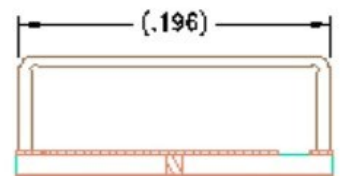
#### Top View



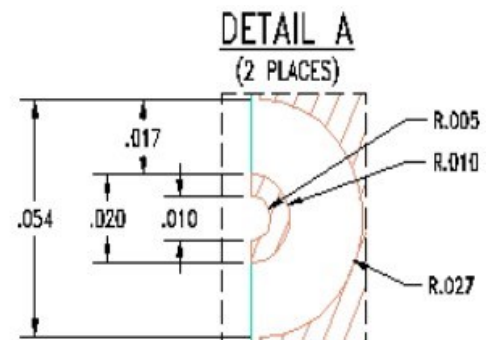
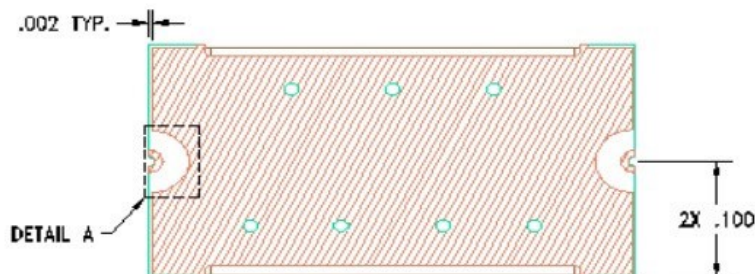
#### Side View



#### End View



#### Bottom View



#### Notes :

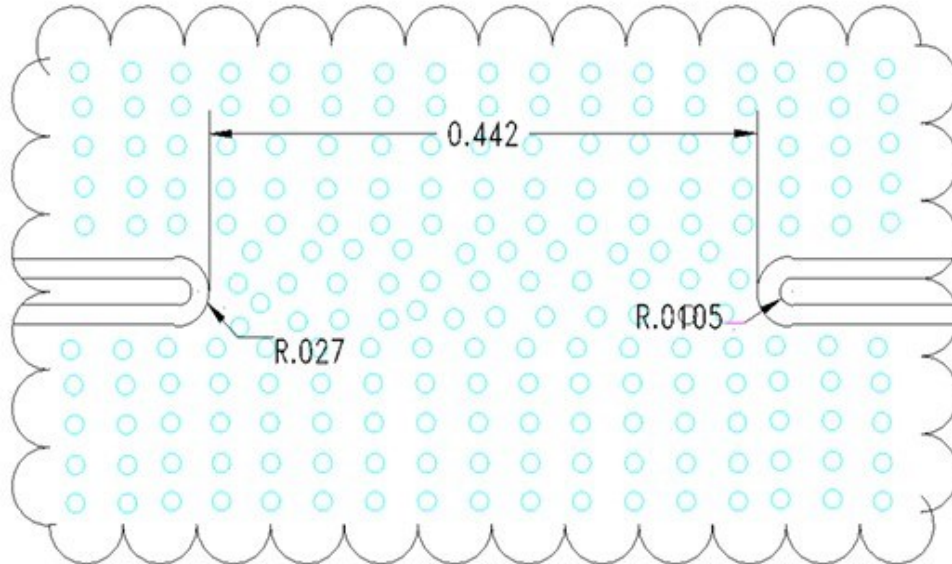
- Termination Finish:  
ENIG: 3 - 6  $\mu\text{inch}$  Au over 50  $\mu\text{inch}$  Ni
- Maximum Assembly Process Temperature: 250°C

#### Tolerances:

For values with 3 decimal places  $\pm 0.001$

For values with 4 decimal places  $\pm 0.0005$

### Recommended PCB Layout



Units = inches

**Note:**

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