

## SYTFB111NC4S 11.4GHz Surface Mount Bandpass Filter

**Frequency Range** 

(GHz)

10.2 - 12.2

DC - 8.3

14.35 - 24.25

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

Min

10.0

40.0

40.0

7.5

0.400 x 0.150 x 0.103 in

10.16 x 3.81 x 2.61 mm

Тур.

1.5

15.0

48.0

48.0

Max

2.25

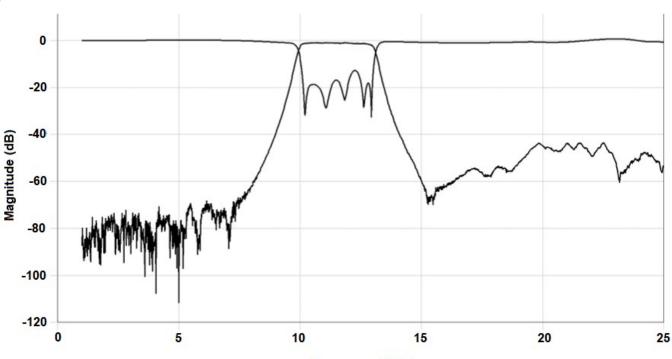
10

#### 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

**Insertion Loss** 

(dB)

**Return Loss** 

(dB)

Low Side

Rejection (dB) High Side

Rejection (dB)

**CW** Input

Power<sup>\*\*</sup> (W)

Size (L x W x H)

 $\theta_{IC}$ 

#### **Typical Measured Performance**

Frequency (GHz)

\*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.

#### Yantel Corporation

Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan Road 35,Xili Street,Nanshan,Shenzhen,China Tel: 86-755-8355-1886 Fax: 86-755-8355-2533 For detailed performance specs & shopping online see Yantel web site : <u>www.yantel-corp.com</u>



# SYTFB111NC4S

### 11.4GHz Surface Mount Bandpass Filter

#### **Physical Dimensions**

Units = inches

#### **Top View**

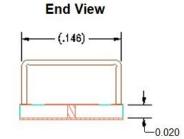
Side View



(.396)

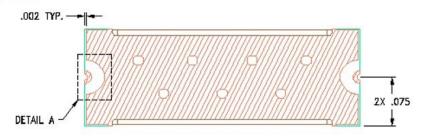
STAINLESS STEEL COVER

CERAMIC FILT



#### **Bottom View**

.088 NOM (.103 MAX)



#### Notes :

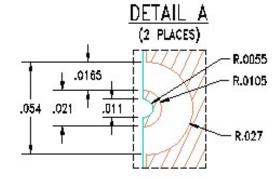
1. Termination Finish:

ENIG: 3 - 6 µinch Au over 50 µinch Ni

2. Maximum Assembly Process Temperature: 250°C

#### **Tolerances:**

For values with 3 decimal places  $\pm 0.001$ For values with 4 decimal places  $\pm 0.0005$ 



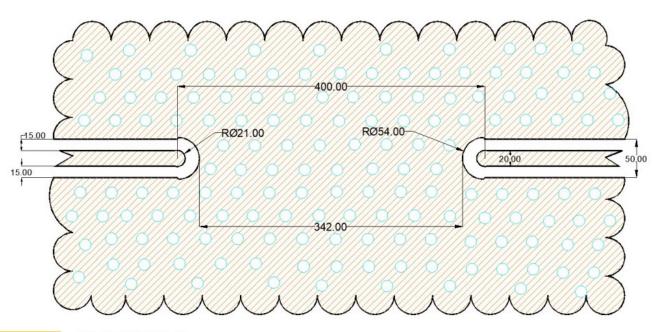


# SYTFB111NC4S

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#### **Recommended PCB Layout**

Unit =mils



**PWB TOP METAL** 

### 

#### 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

