

# SYTFB100MD2S

10.0GHz Surface Mount Bandpass Filter

**Frequency Range** 

(GHz)

9.5 - 10.5

DC - 8.25

12.6 - 19.0

Min

10.0

40.0

40.0

7.5

6.35 x 4.06 x 2.50 mm

Тур.

0.7

15.0

50.0

50.0

Max

1.5

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
- C

<ul> <li>Characteristic Impedance: 50Ω</li> </ul>					*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.										
Турі	cal Mea	sured Pe	erforma	nce											
	0					$\gamma$									
	-10					$\wedge$	$\wedge$								
	-20					/ /									
(dB)	-30					h		$\setminus$							
tude	-40														
Magnitude (dB)	-50										~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~/		
	-60			$\backslash$											
	-80			Y											
	-90												1		_
	2	3 4	5	67	8		<sup>10 11</sup> quency	12 • (GHz	13 )	14 1	5 16	17	18	19	20

Specifications\*

Parameter

**Insertion Loss** 

(dB)

**Return Loss** 

(dB)

Low Side

Rejection (dB) **High Side** 

Rejection (dB)

**CW** Input

Power\*\* (W)

Size (L x W x H)

 $\theta_{IC}$ 

### T١

\*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.



# SYTFB100MD2S

10.0GHz Surface Mount Bandpass Filter



### Notes :

1. Termination Finish:

ENIG: 76-152  $\mu m$  Au over 1270  $\mu m$  Ni

- 2. Maximum Assembly Process Temperature: 250°C
- 3.Dimension tolerance: ±0.05



# SYTFB100MD2S

10.0GHz Surface Mount Bandpass Filter

**Recommended PCB Layout** 



Unit = mm

Note:

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