

# SYTFB0420D4S

4.25GHz 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

	Parameter	Frequency Range (GHz)	Min	Тур.	Мах
-	Insertion Loss (dB)	3.75 - 4.75		3.0	3.5
	Return Loss (dB)			12.0	15.0
	Low Side Rejection (dB)	DC - 3.0		40.0	45.0
	High Side Rejection (dB)	5.6 - 10.0		40.0	50.0
	CW Input Power** (W)				10
	$\theta_{JC} \left( \frac{^{\circ}C}{W} \right)$	7.5			
	Size (L x W x H)	12.7 x 6.35 x 2.79 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.



Specifications\*

**Typical Measured Performance** 

\*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.



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Side View

End View

Units = mm





## **Bottom View**



## 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



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## **Recommended PCB Layout**



Units = mm

## Note:

- $50\Omega$  trace dimensions are application specific.
- Ensure adequate grounding beneath the part.