

# SYTFH182XHXS

## 18.2 GHz Surface Mount Highpass Filter

#### **Description**

Yantel's high frequency surface mount highpass filters utilize Yantel's high dielectric ceramic materials which provide small size and minimal performance variation over temperature. The catalog HPF's are offered in a variety of frequency bands, which offers a drop in solution for high frequency attenuation.

#### **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

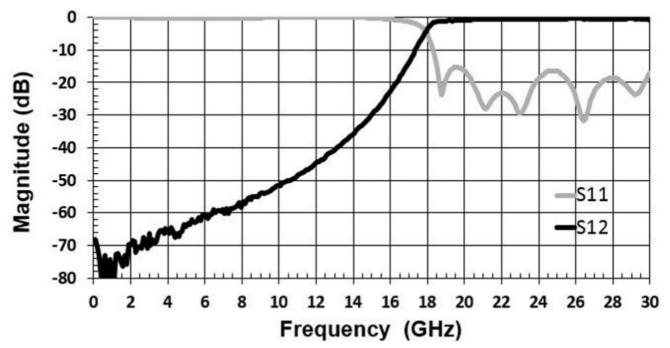
#### Specifications\*

Parameter	Frequency Range (GHz)	Min	Тур.	Max
Insertion Loss (dB)	18.75 - 28.0		1.0	2.0
Return Loss (dB)		12.0	15.0	
Low Side Rejection (dB)	DC - 14.0	30.0		
CW Input Power** (W)				15.0
$\theta_{JC} \left( \frac{^{\circ}C}{W} \right)$	5.0			
Size (L x W x H)	11.43 x 4.45 x 2.50 mm			

<sup>\*</sup>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

### **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 at room temperature.

<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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#### **Physical Dimensions**

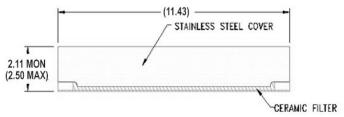
Units = mm

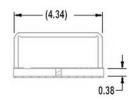
#### **Top View**



#### Side View

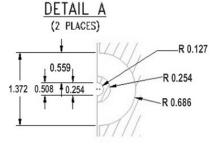
#### **End View**





#### **Bottom View**





#### 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

2X 2.24

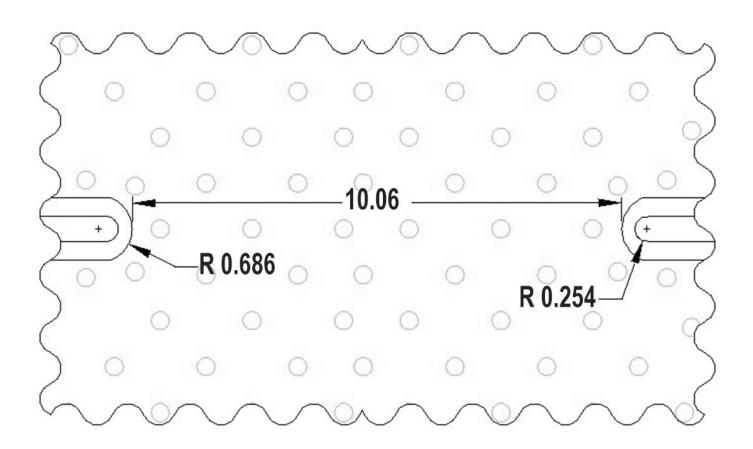


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### **Recommended PCB Layout**

Unit = mm



### Note:

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