

### 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

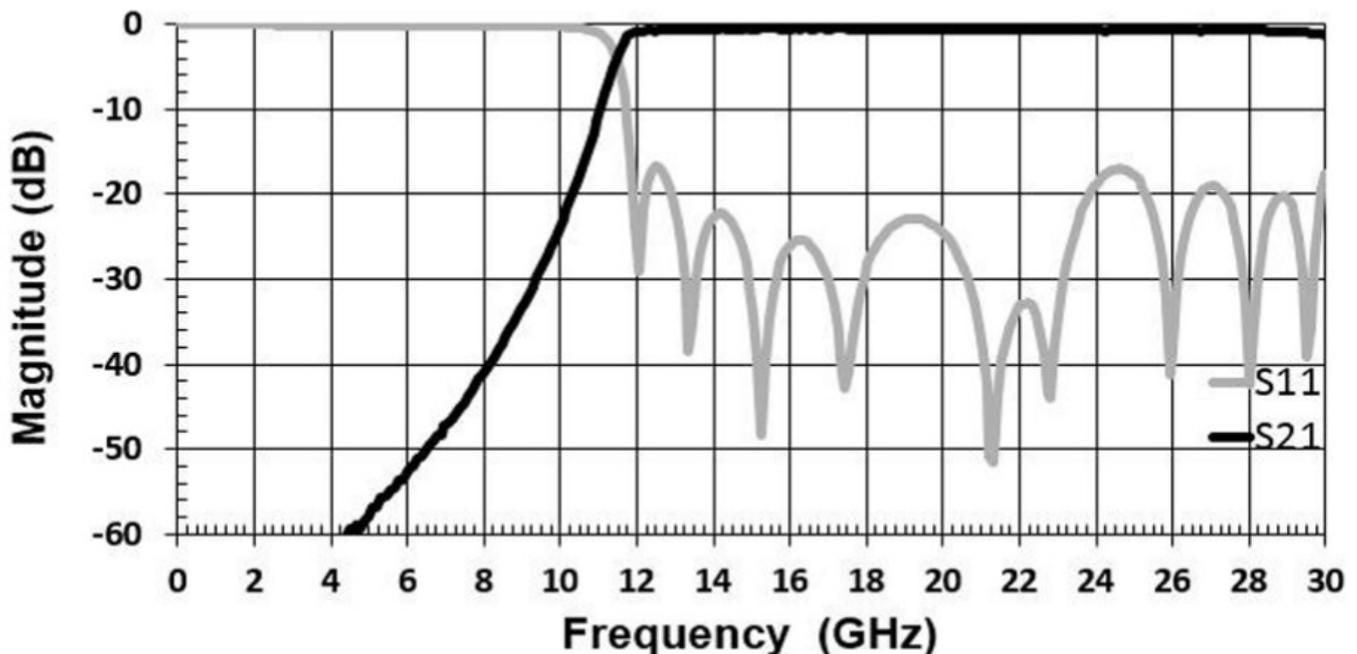
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	12.5 - 30.0		1.0	2.5
Return Loss (dB)		12.0	16.0	
Low Side Rejection (dB)	DC - 9.0	30.0		
CW Input Power** (W)				15.0
$\theta_{jc} \left( \frac{^{\circ}\text{C}}{\text{W}} \right)$	5.0			
Size (L x W x H)	0.450 x 0.175 x 0.098 in 11.43 x 4.45 x 2.49 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

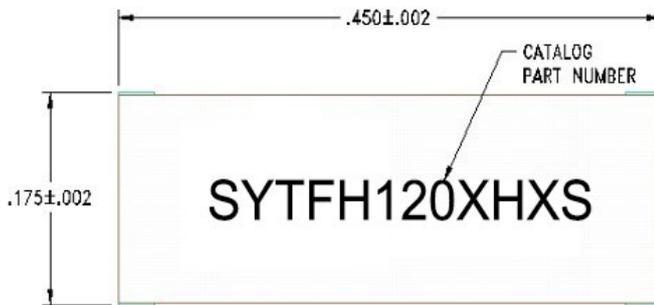


\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.

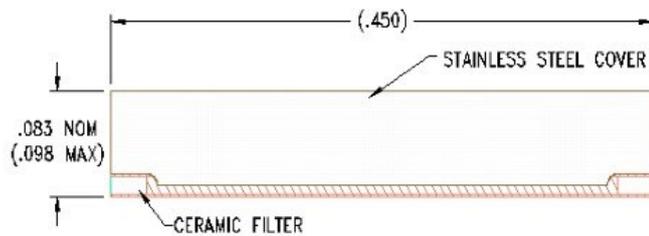
### Physical Dimensions

Units = inches

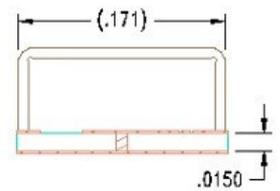
#### Top View



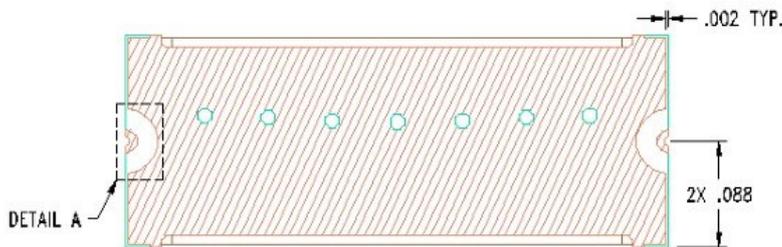
#### Side View



#### End View



#### Bottom View



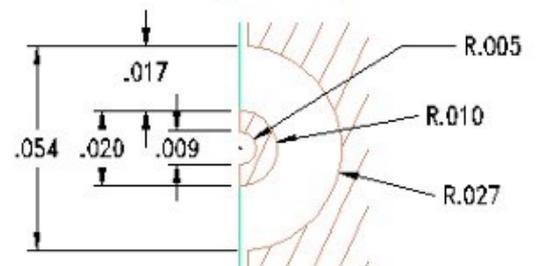
#### Notes :

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

#### Tolerances:

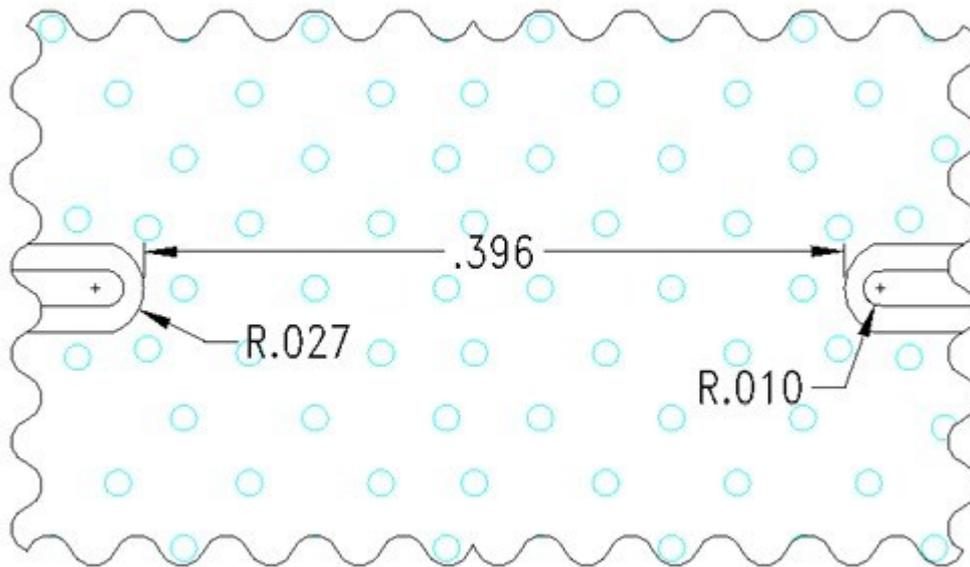
- For values with 3 decimal places  $\pm 0.001$   
For values with 4 decimal places  $\pm 0.0005$

#### DETAIL A (2 PLACES)



### Recommended PCB Layout

Unit = inches



#### Note:

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