

### 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

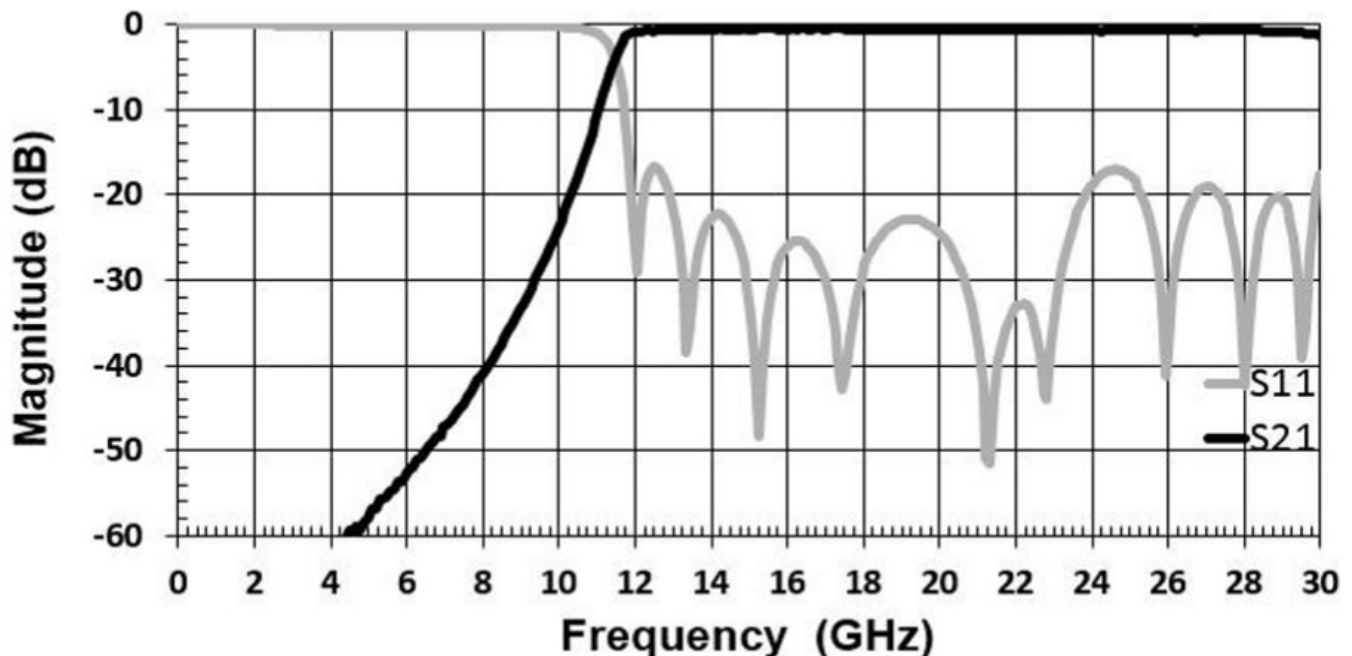
### Specifications\*

| 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<br>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 50.0Ω CPW ground traces going into the ports at room temperature.

### Yantel Corporation

Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyan Road 35,Xili Street,Nanshan,Shenzhen,China

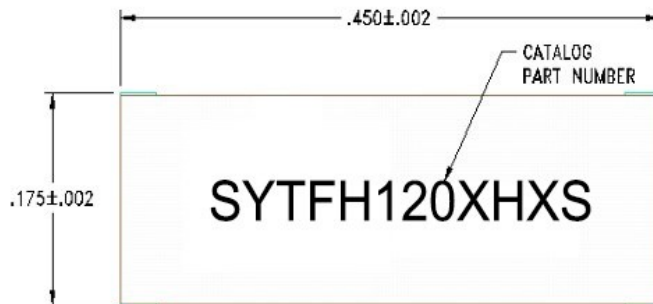
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

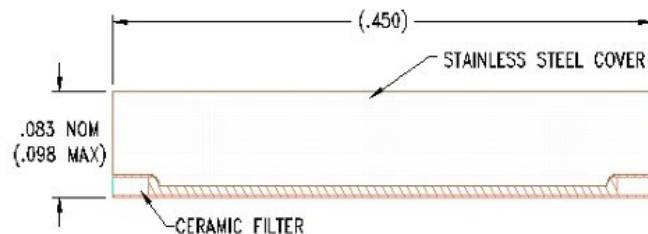
### Physical Dimensions

Units = inches

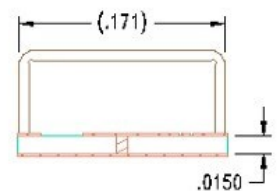
#### Top View



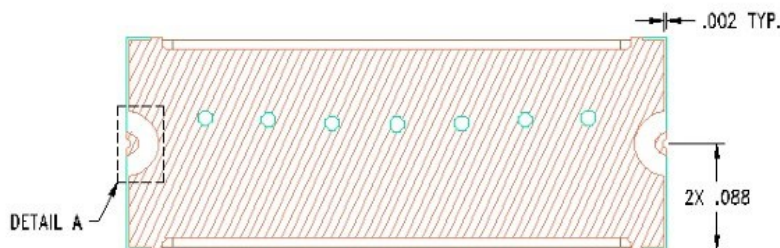
#### Side View



#### End View



#### Bottom View



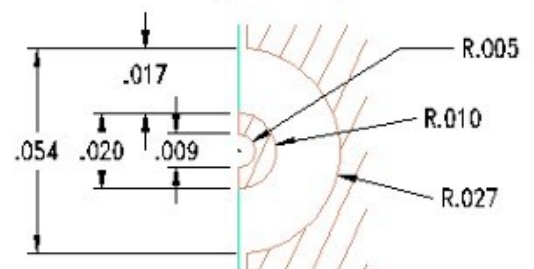
#### Notes :

- Termination Finish:  
ENIG: 3 - 6 μinch Au over 50 μinch Ni
- Maximum Assembly Process Temperature: 250°C

#### Tolerances:

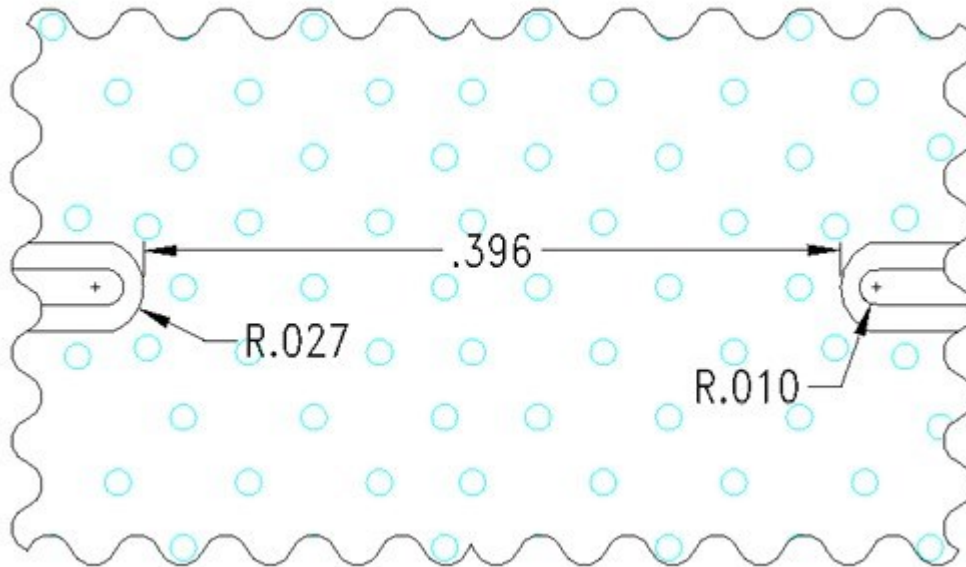
For values with 3 decimal places ±0.001  
For values with 4 decimal places ±0.0005

#### DETAIL A (2 PLACES)



### Recommended PCB Layout

Unit = inches



#### Note:

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