

### 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

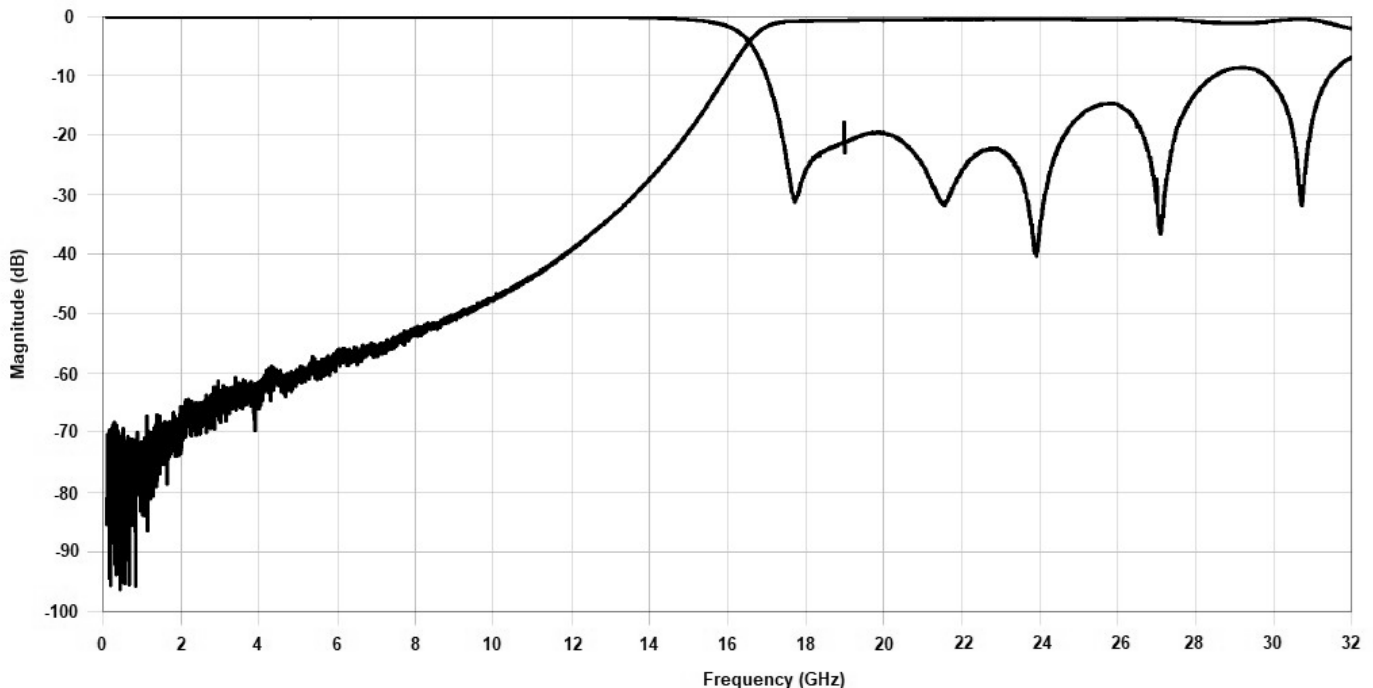
### Specifications\*

| Parameter  | Frequency Range (GHz)                              | Min  | Typ. | Max  |
|--|--|------|------|------|
| Insertion Loss (dB)  | 17.5 - 27.0  |      | 1.0  | 1.5  |
| Return Loss (dB)   |  | 12.0 | 15.0 |      |
| Low Side Rejection (dB)  | DC - 13.0  | 30.0 | 35.0 |      |
| 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 50.0Ohm CPW ground traces going into the ports at room temperature.

### Yantel Corporation

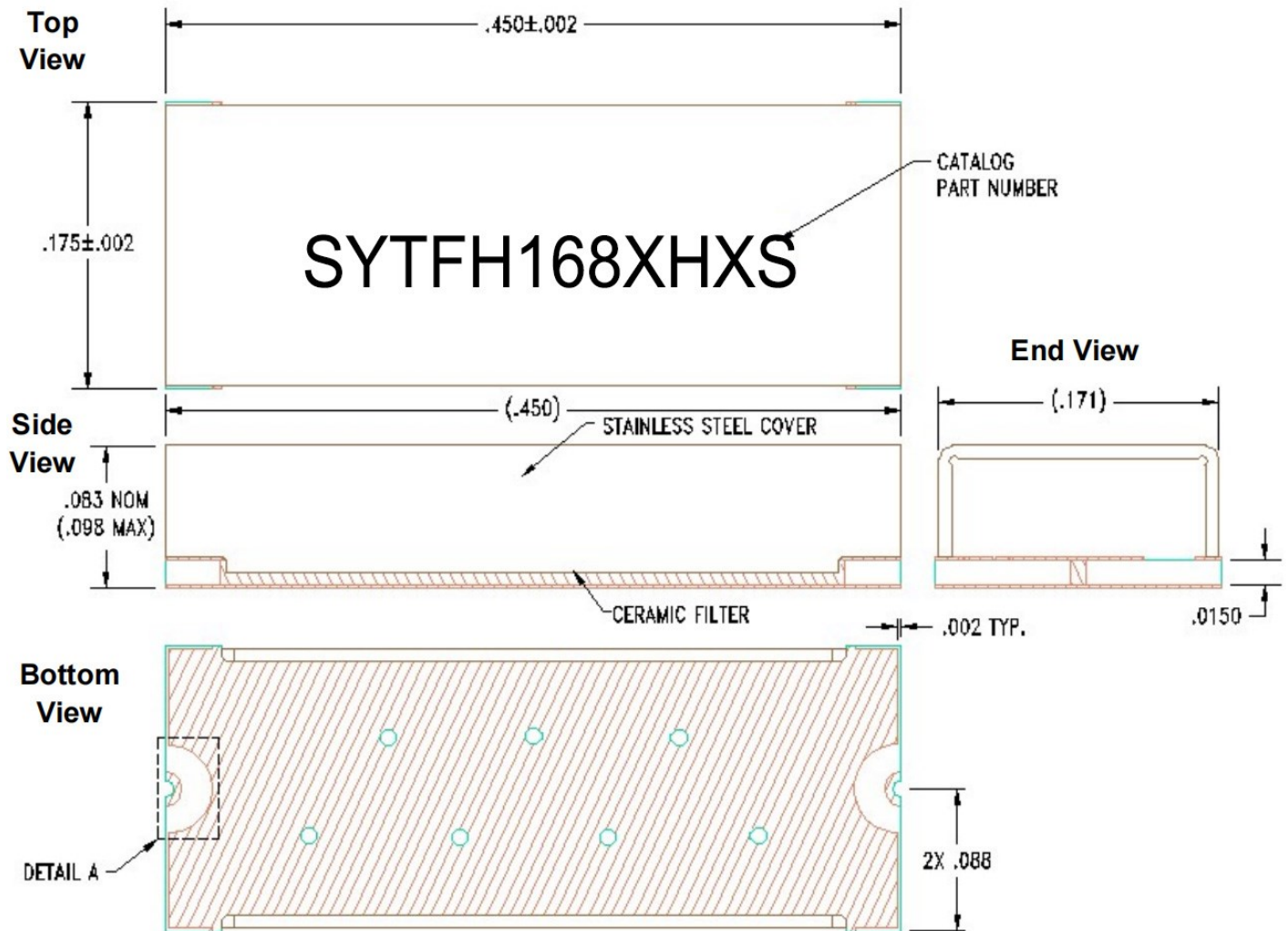
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For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

### Physical Dimensions

Units = inches

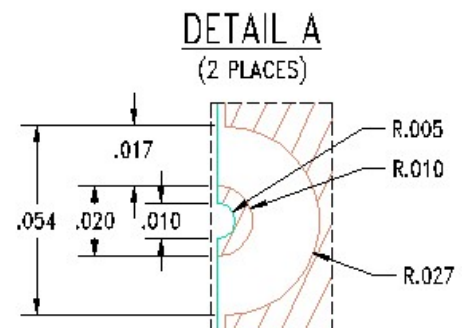


### Notes :

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

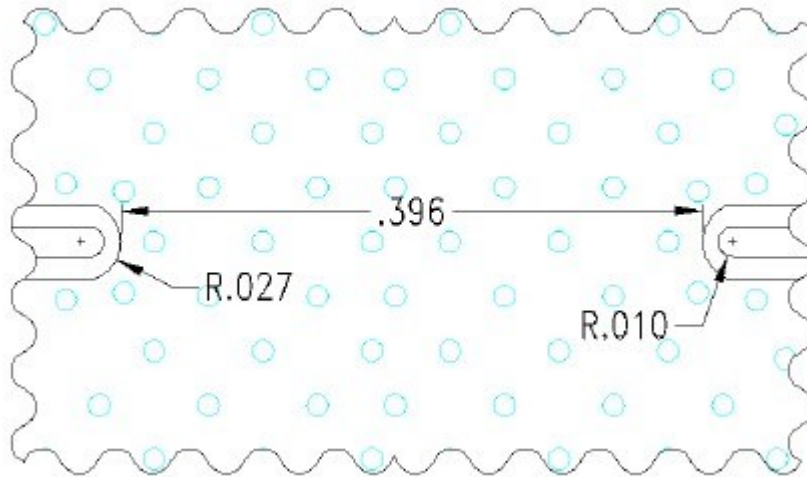
### Tolerances:

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



### Recommended PCB Layout

Unit = inches



#### Note:

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