

### 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

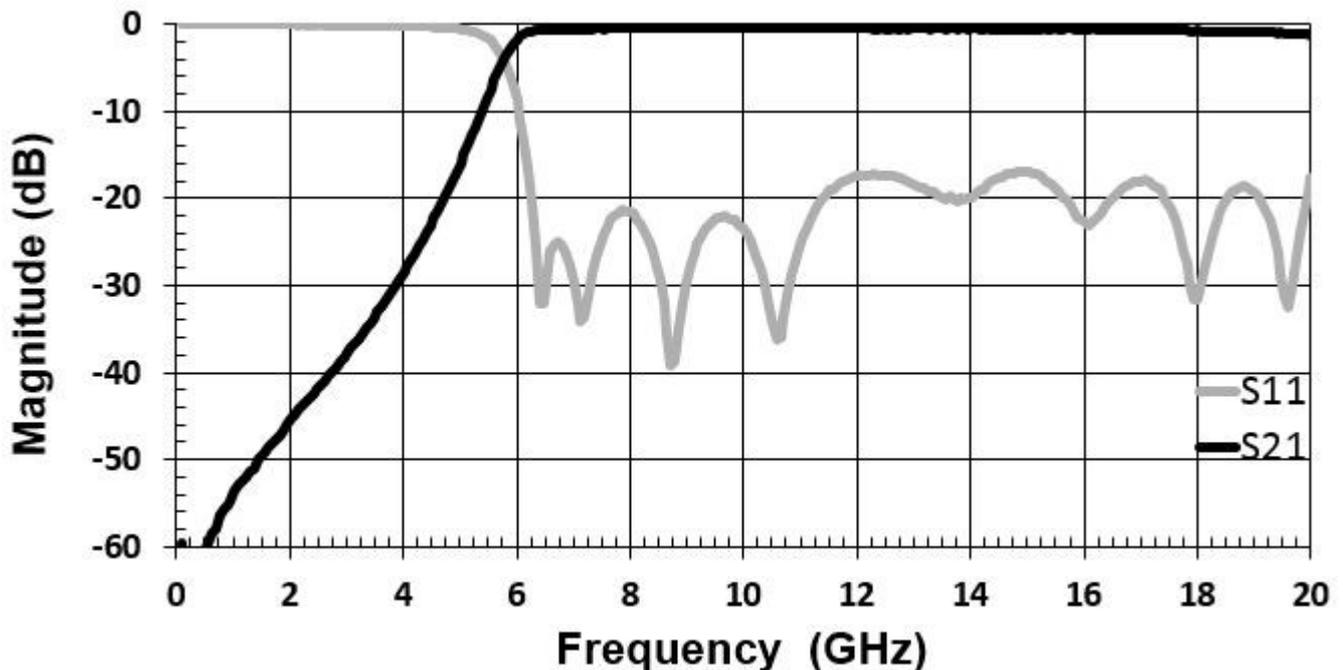
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	6.5 - 19.5		0.75	2.0
Return Loss (dB)		15.0	17.0	
Low Side Rejection (dB)	DC - 3.5	30.0		
CW Input Power** (W)	6.5 - 19.5			25.0
$\theta_{JC} \left( \frac{^{\circ}C}{W} \right)$	3.0			
Size (L x W x H)	0.450 x 0.200 x 0.108 in 11.43 x 5.08 x 2.74 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.

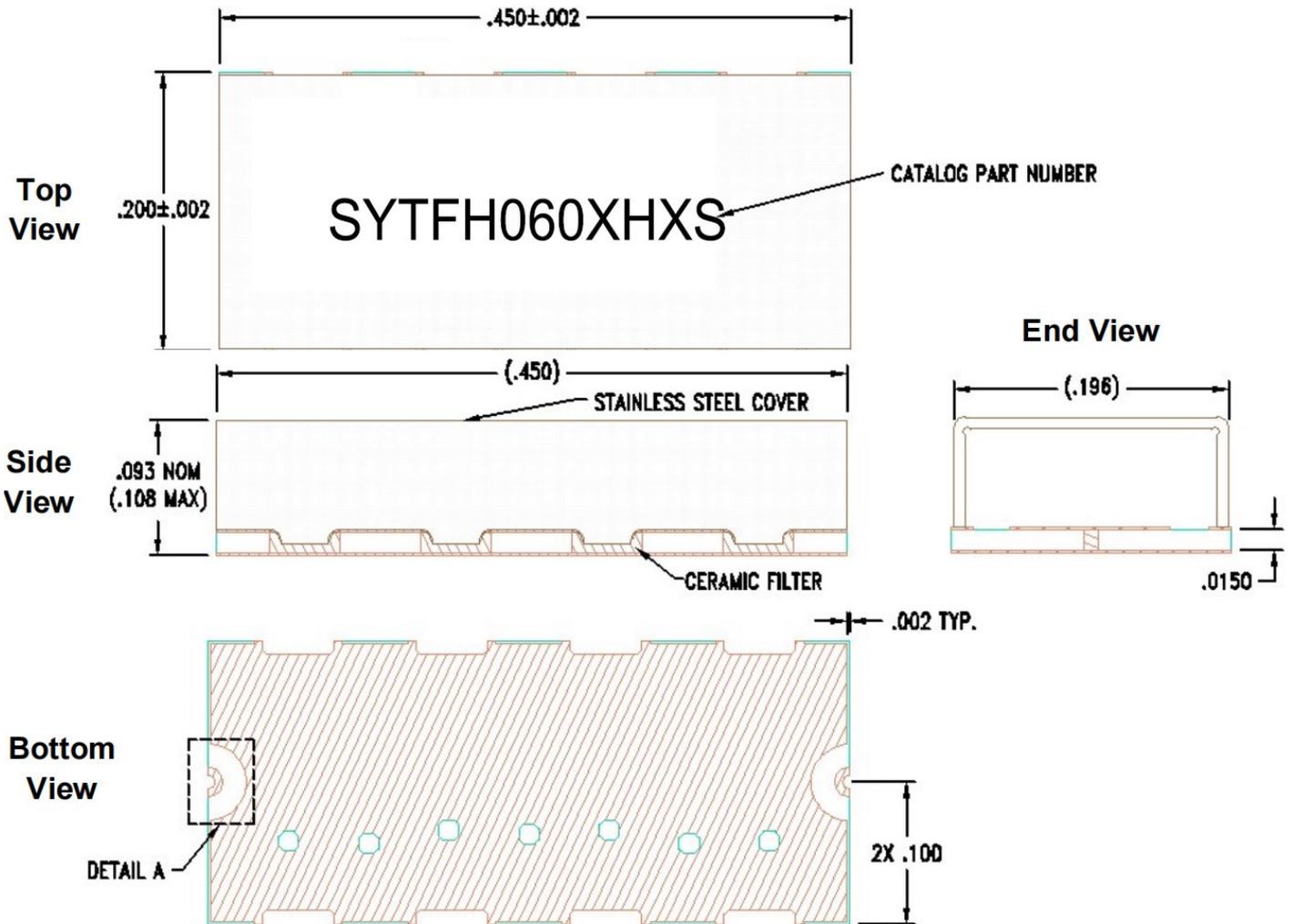
### Typical Measured Performance



\*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

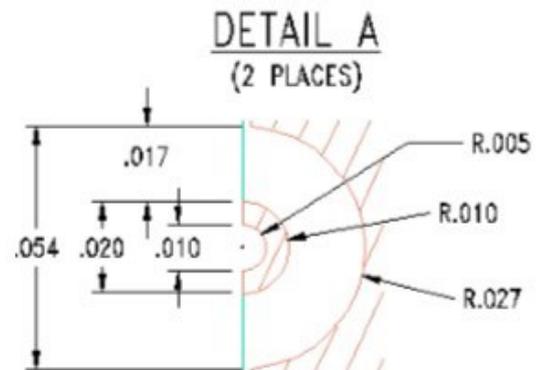


### Notes :

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

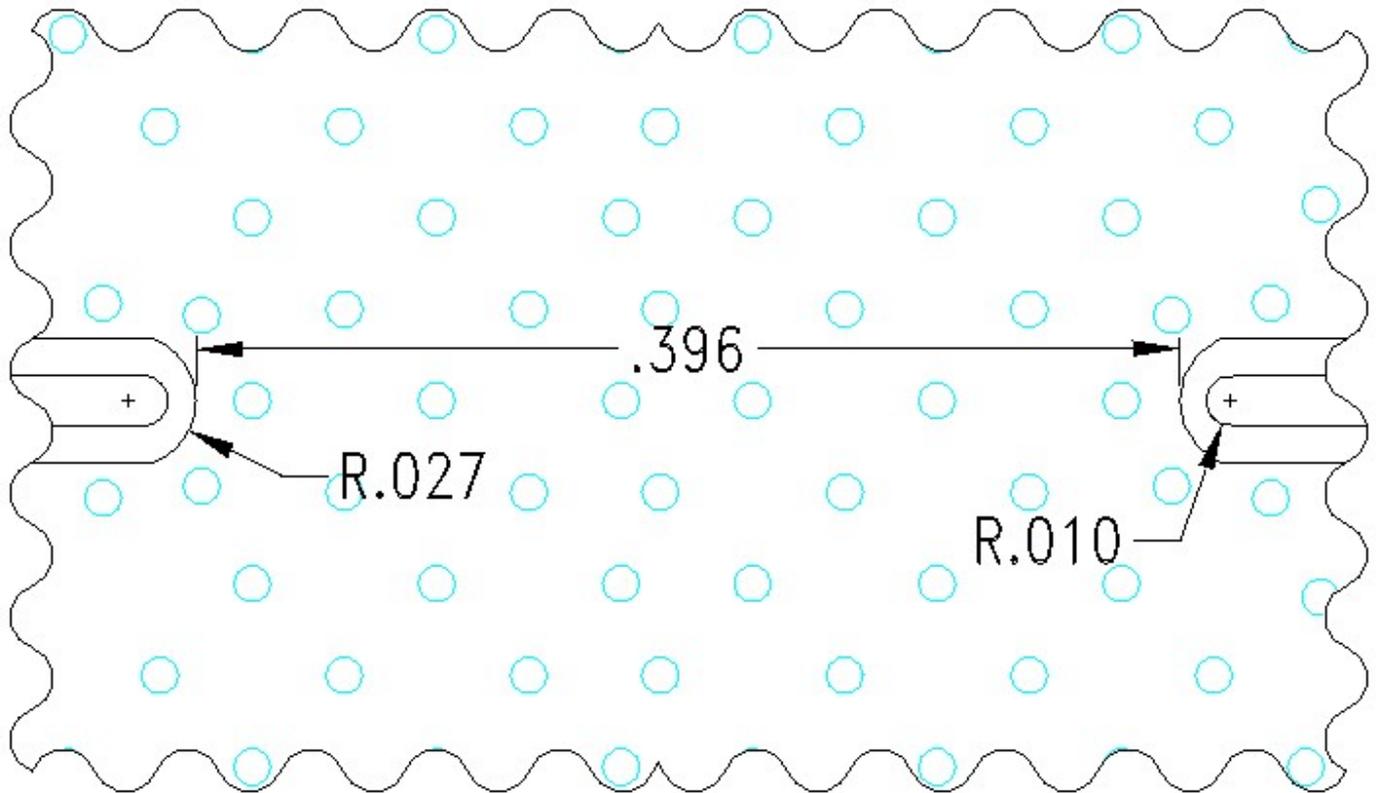
### Tolerances:

- For values with 3 decimal places  $\pm 0.001$
- 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.
- Trace feed locations can be horizontal, vertical or angled.