

### 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

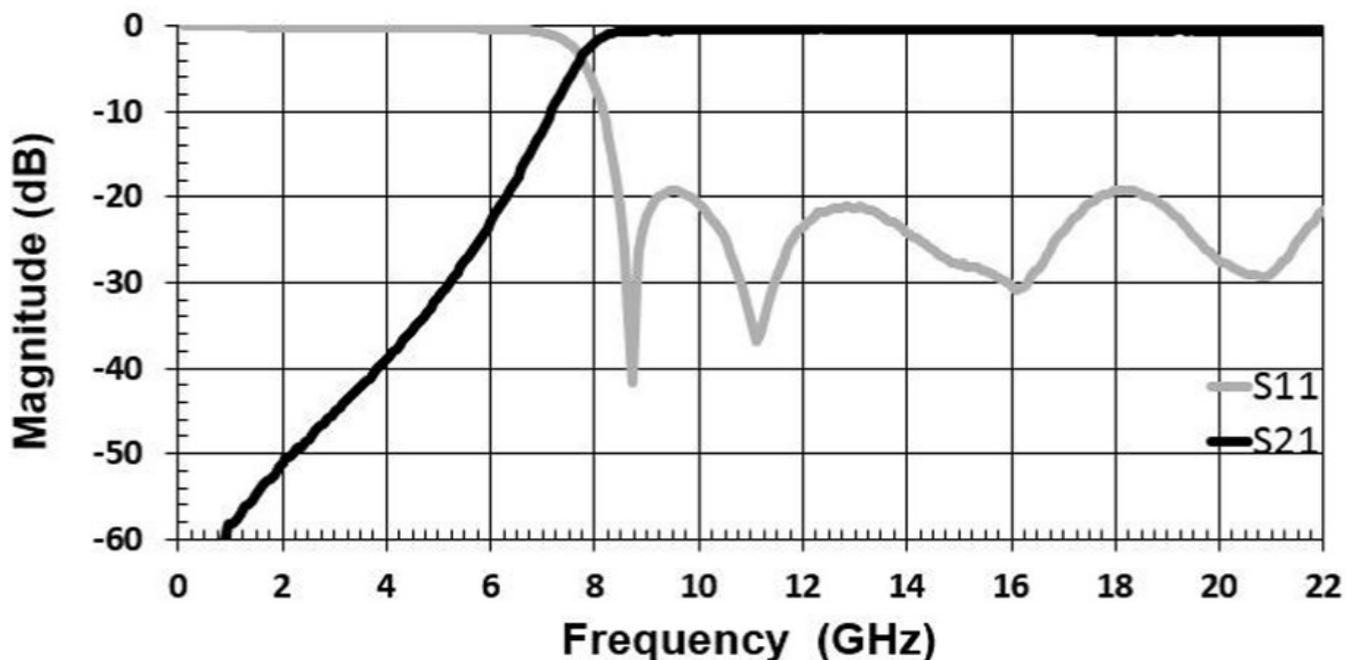
### Specifications\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	8.5 - 22.0		0.75	2.0
Return Loss (dB)		15.0	20.0	
Low Side Rejection (dB)	DC – 5.0	30.0		
CW Input Power** (W)				25.0
$\theta_{jc} \left( \frac{^{\circ}\text{C}}{\text{W}} \right)$	3.0			
Size (L x W x H)	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

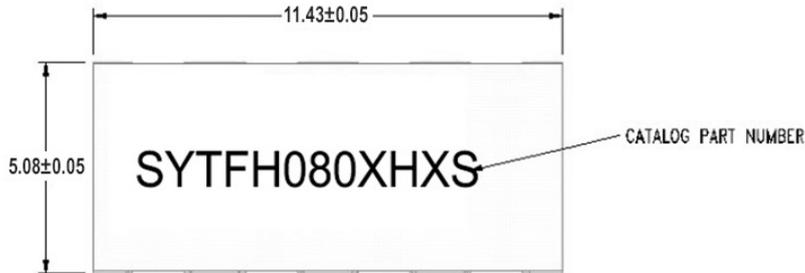


\*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.

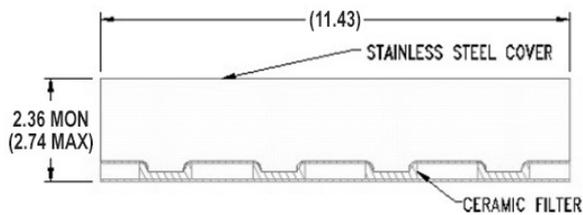
### Physical Dimensions

Units = mm

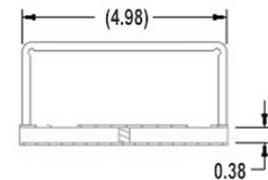
#### Top View



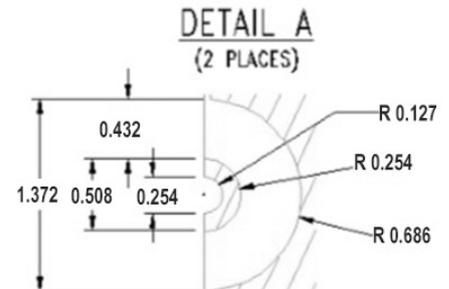
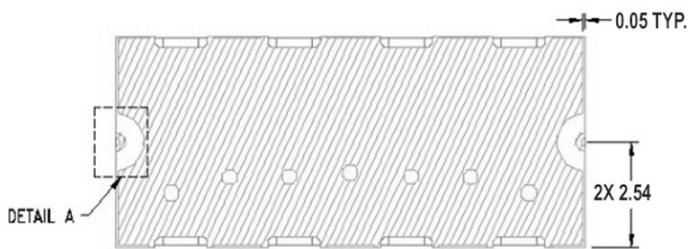
#### Side View



#### End View



#### Bottom View

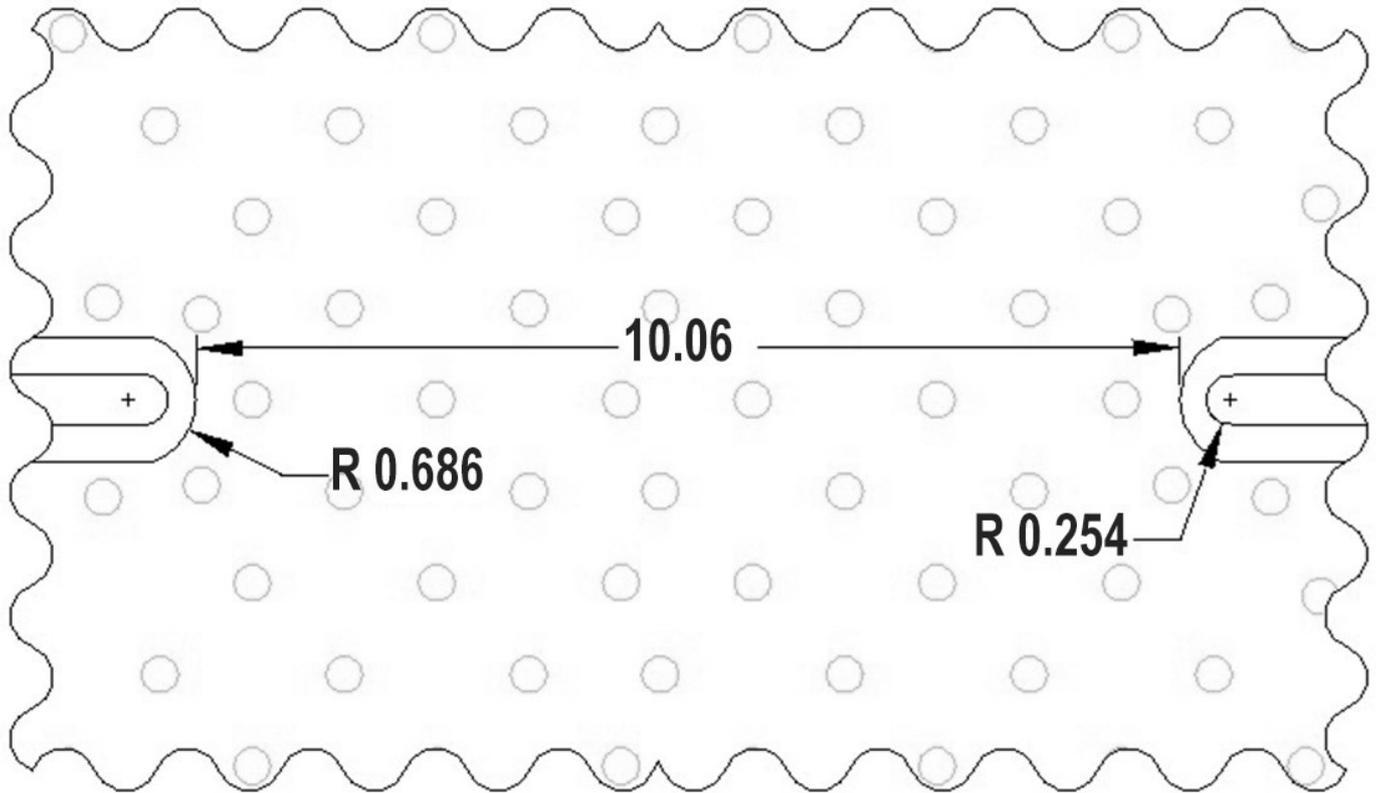


#### Notes :

1. Termination Finish:  
ENIG:  $76\text{-}152 \mu\text{m Au}$  over  $1270 \mu\text{m Ni}$
2. Maximum Assembly Process Temperature:  $250^\circ\text{C}$
3. Dimension tolerance:  $\pm 0.05$

### Recommended PCB Layout

Unit = mm



#### Note:

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