SYTFH100XHXS

10.0 GHz Surface Mount Highpass Filter

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

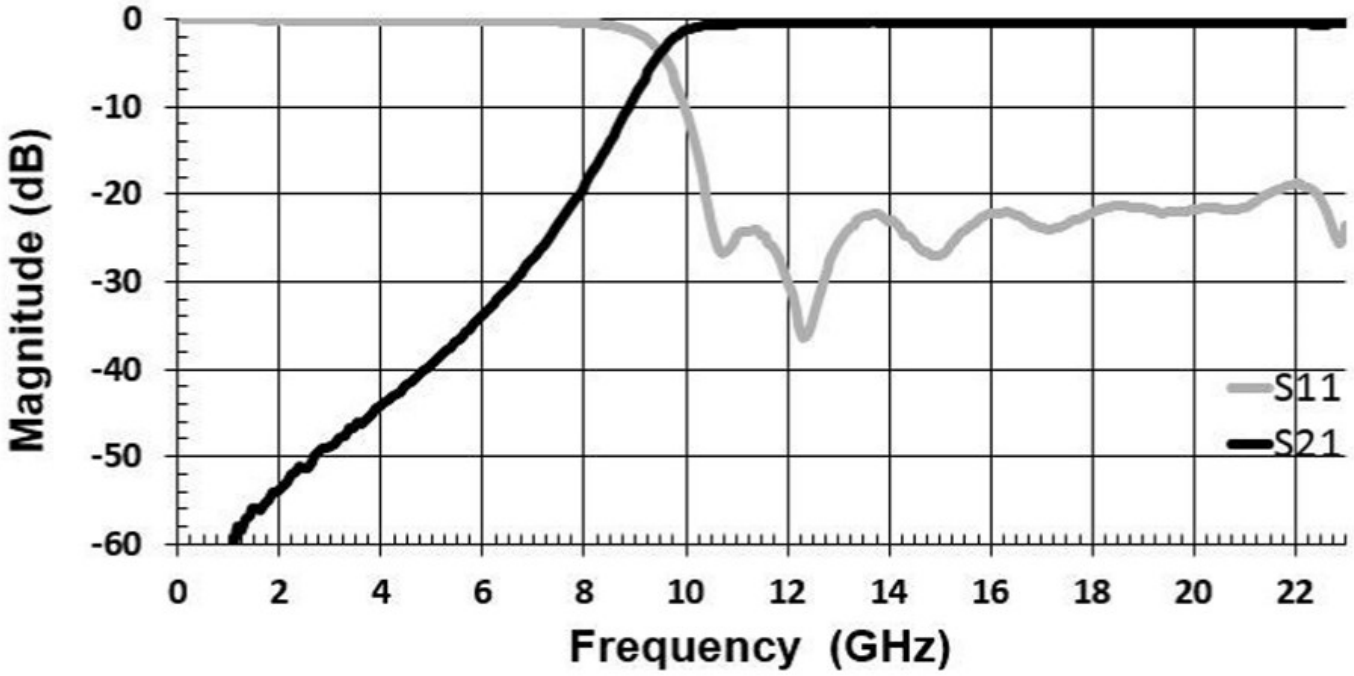
- Small Size
- Fully Shielded Component
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55˚C to +125˚C
- Characteristic Impedance: 50Ω

Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	10.5 - 23.0		0.75	2.0
Return Loss (dB)		10.0	18.0	
Low Side Rejection (dB)	DC – 5.5	30.0		
CW Input Power** (W)				15.0
θ_{jc} $\left(\frac{°C}{W}\right)$	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 ±0.5dB 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



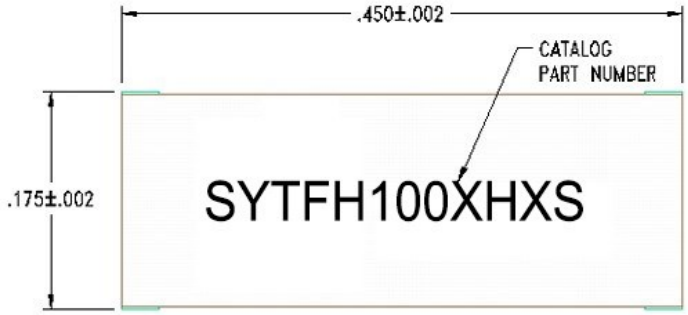
*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.

Yantel Corporation
Add：No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan 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

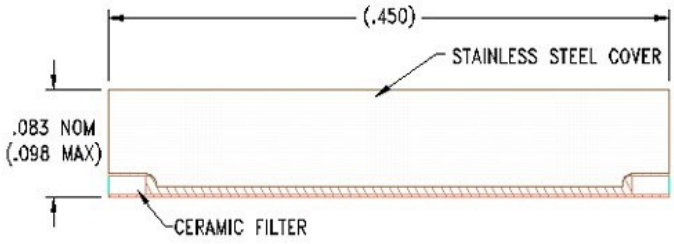
Physical Dimensions

Units = inches

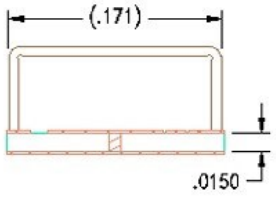
Top View



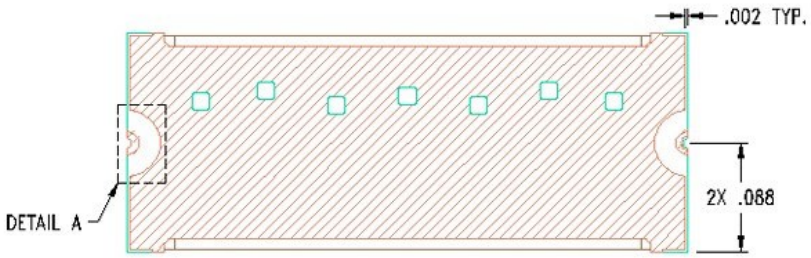
Side View



End View



Bottom View



Notes :

1. Termination Finish:

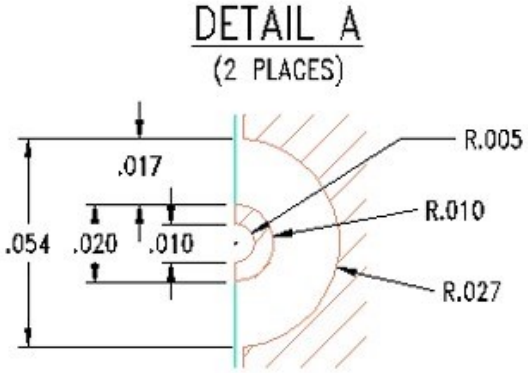
   ENIG: 3 - 6 µinch Au over 50 µinch Ni

2. Maximum Assembly Process Temperature: 250°C

Tolerances:

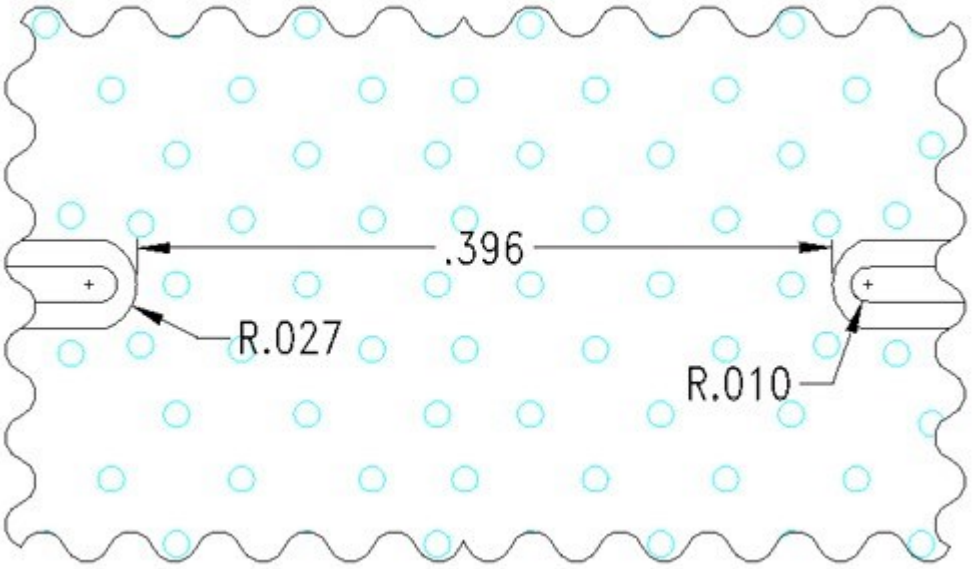
For values with 3 decimal places ±0.001

For values with 4 decimal places ±0.0005



Recommended PCB Layout

Unit = inches



Note:

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