

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

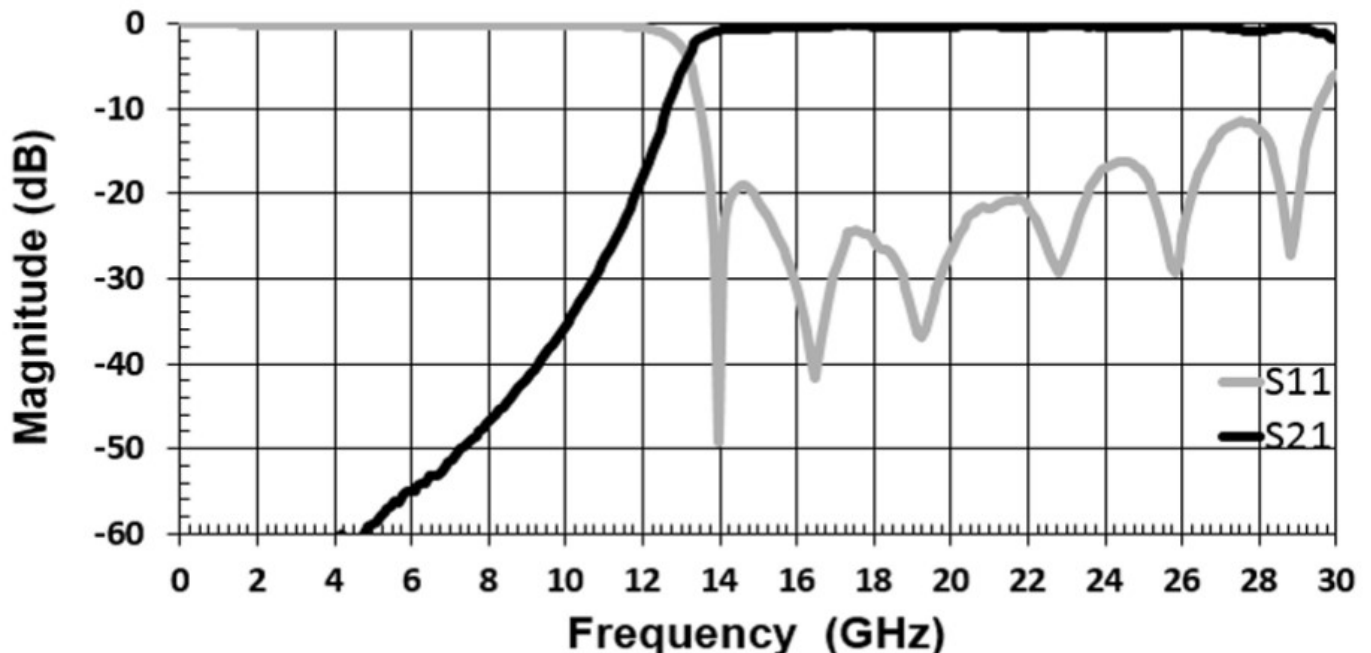
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	14.0 - 28.0		1.5	3.0
Return Loss (dB)		10.0	14.0	
Low Side Rejection (dB)	DC – 9.5	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 11.43 x 4.45 x 2.49 mm			

*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ± 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

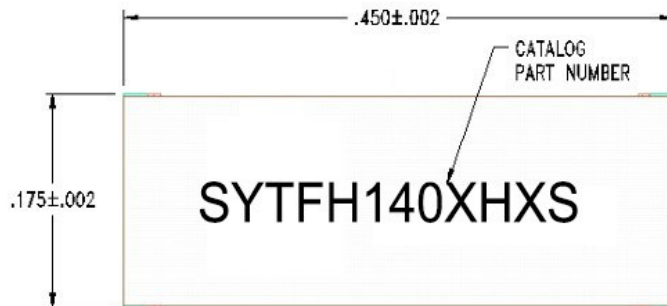


*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ω CPW ground traces going into the ports at room temperature.

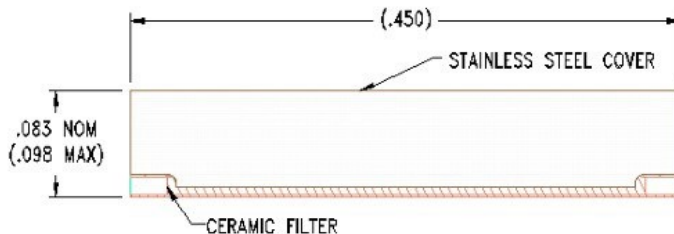
Physical Dimensions

Units = inches

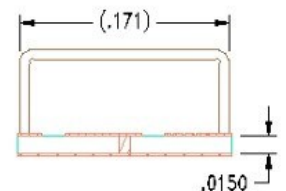
Top View



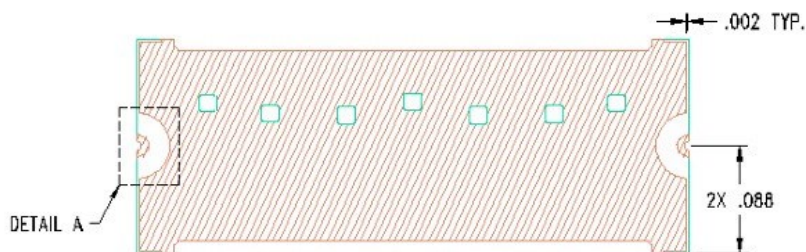
Side View



End View



Bottom View



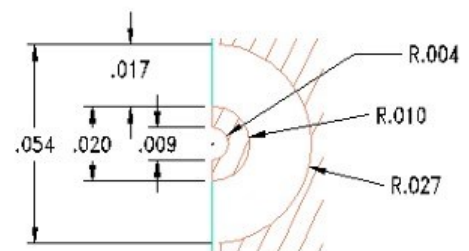
Notes :

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

Tolerances:

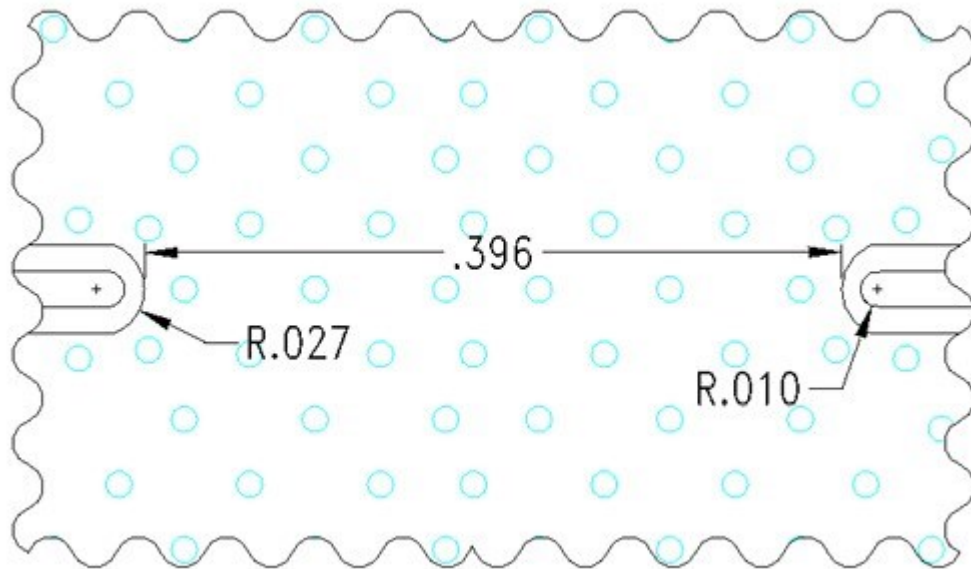
For values with 3 decimal places $\pm$ 0.001
For values with 4 decimal places $\pm$ 0.0005

DETAIL A (2 PLACES)



Recommended PCB Layout

Unit = inches



Note:

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