

Description

Yantel's surface mount catalog bandpass filters utilize Yantel's low loss temperature stable materials which offer small size and minimal performance variation over temperature. The catalog BPF's are offered in a variety of frequency bands, which offers a drop in solution with highly repeatable performance.

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

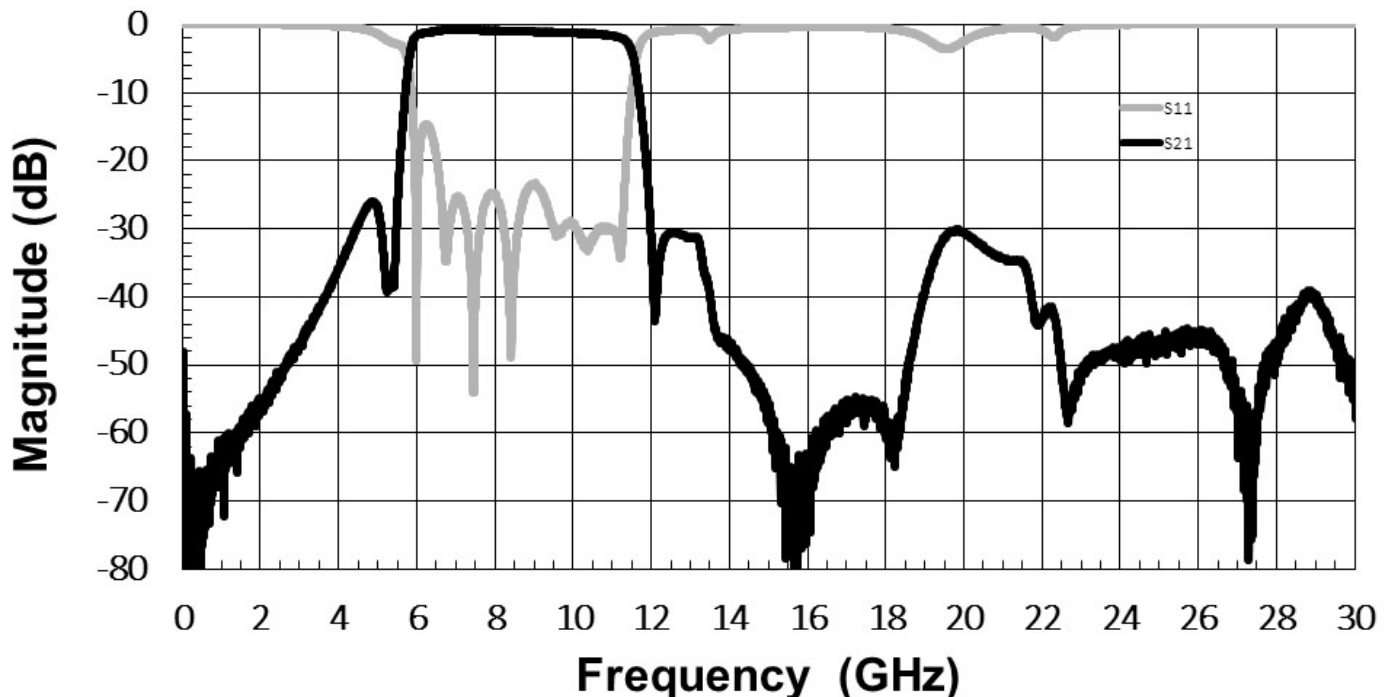
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	6.0 - 11.0		2.0	2.75
Return Loss (dB)		13.0	15.0	
Low Side Rejection (dB)	DC - 5.5	23.0	25.0	
High Side Rejection (dB)	12.0 - 33.0	28.0	30.0	
CW Input Power** (W)				10
$\theta_{jc} \left(\frac{^{\circ}C}{W} \right)$	7.5			
Size (L x W x H)	0.190 x 0.100 x 0.090 in 4.83 x 2.54 x 2.29 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.

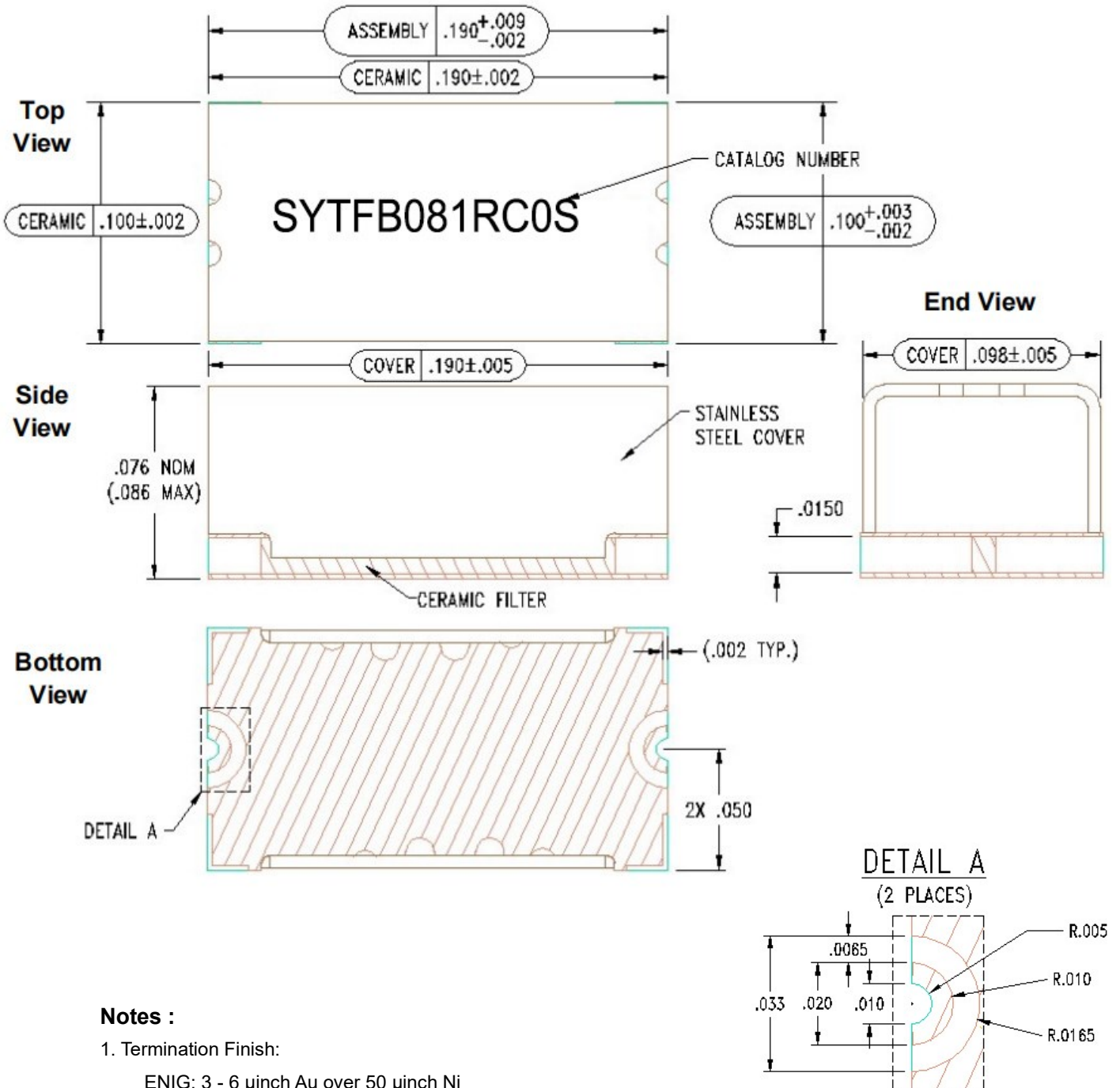
Typical Measured Performance



*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



Notes :

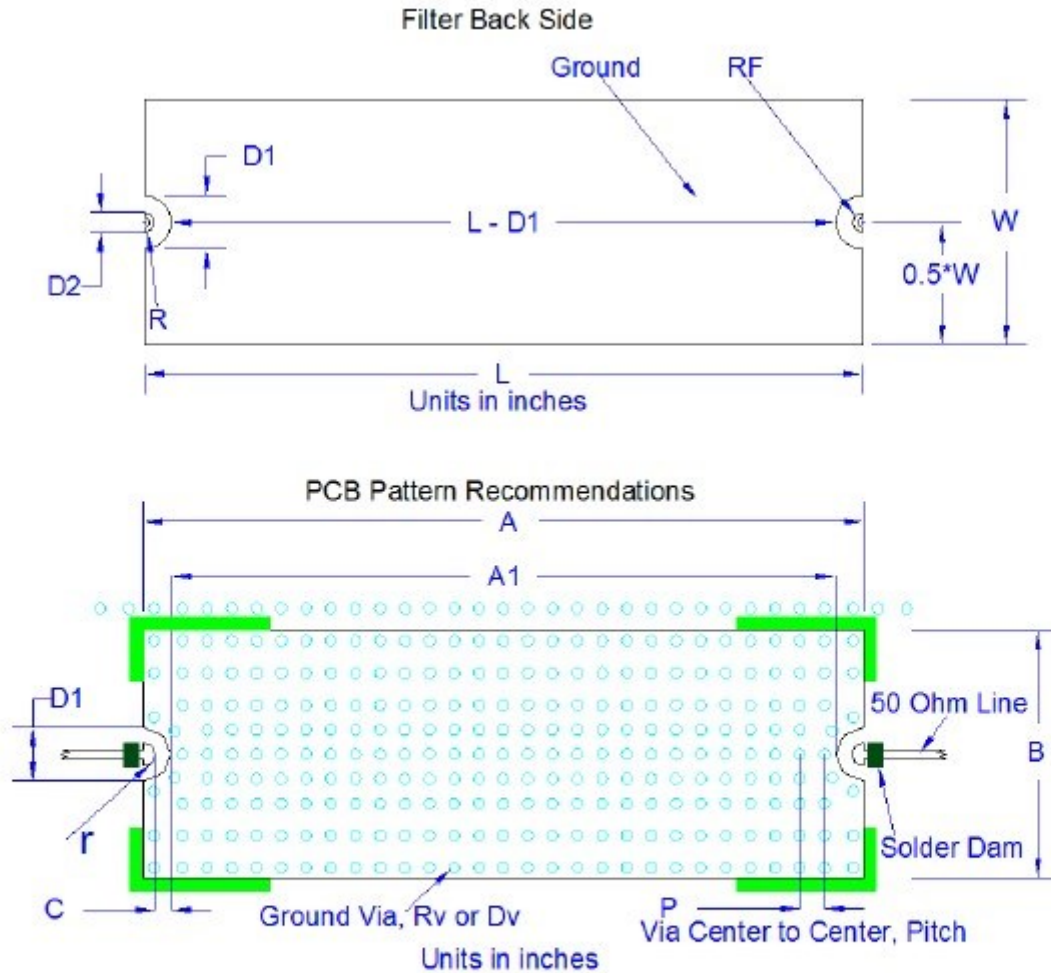
- Termination Finish:
ENIG: 3 - 6 μinch Au over 50 μinch Ni
- Maximum Assembly Process Temperature: 250°C

Tolerances:

For values with 3 decimal places ± 0.001

For values with 4 decimal places ± 0.0005

Recommended PCB Layout



L	W	D1	D2	R	r	A	A1	B	C
0.19	0.10	0.033	0.02	0.5*D2	R	L+0.002	L - D1	W+0.002	0.0065

Unit = inches

Note:

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