SYTFB084MC6S

8.42GHz Surface Mount Bandpass Filter

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)	8.00 - 8.84		3.3	4.0
Return Loss (dB)		10.0	15.0	
Low Side Rejection (dB)	DC - 7.0	40.0	50.0	
High Side Rejection (dB)	9.75 - 21.0	40.0	45.0	
CW Input Power** (W)				5
$\theta_{JC} \left(\frac{°C}{W} \right)$	15			
Size (L x W x H)	0.600 x 0.300 x 0.093 in 15.24 x 7.62 x 2.37 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
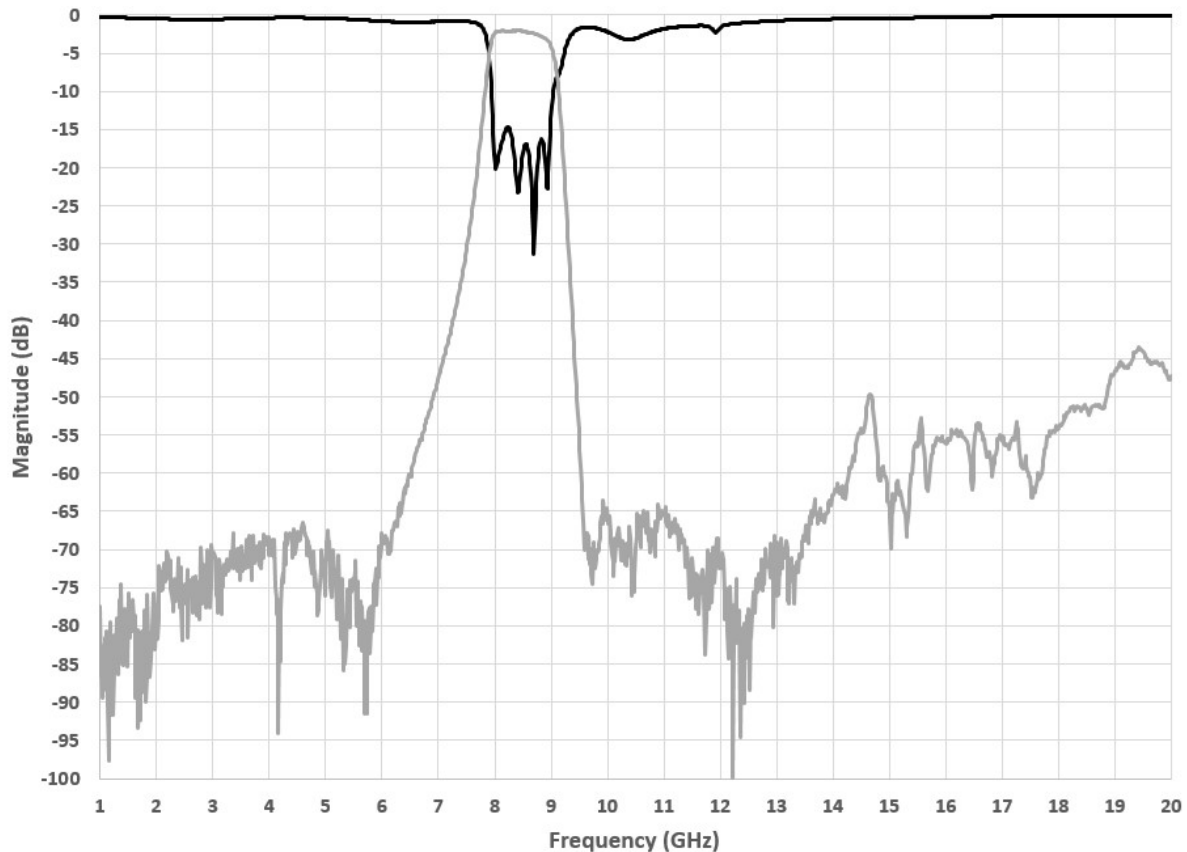
*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.
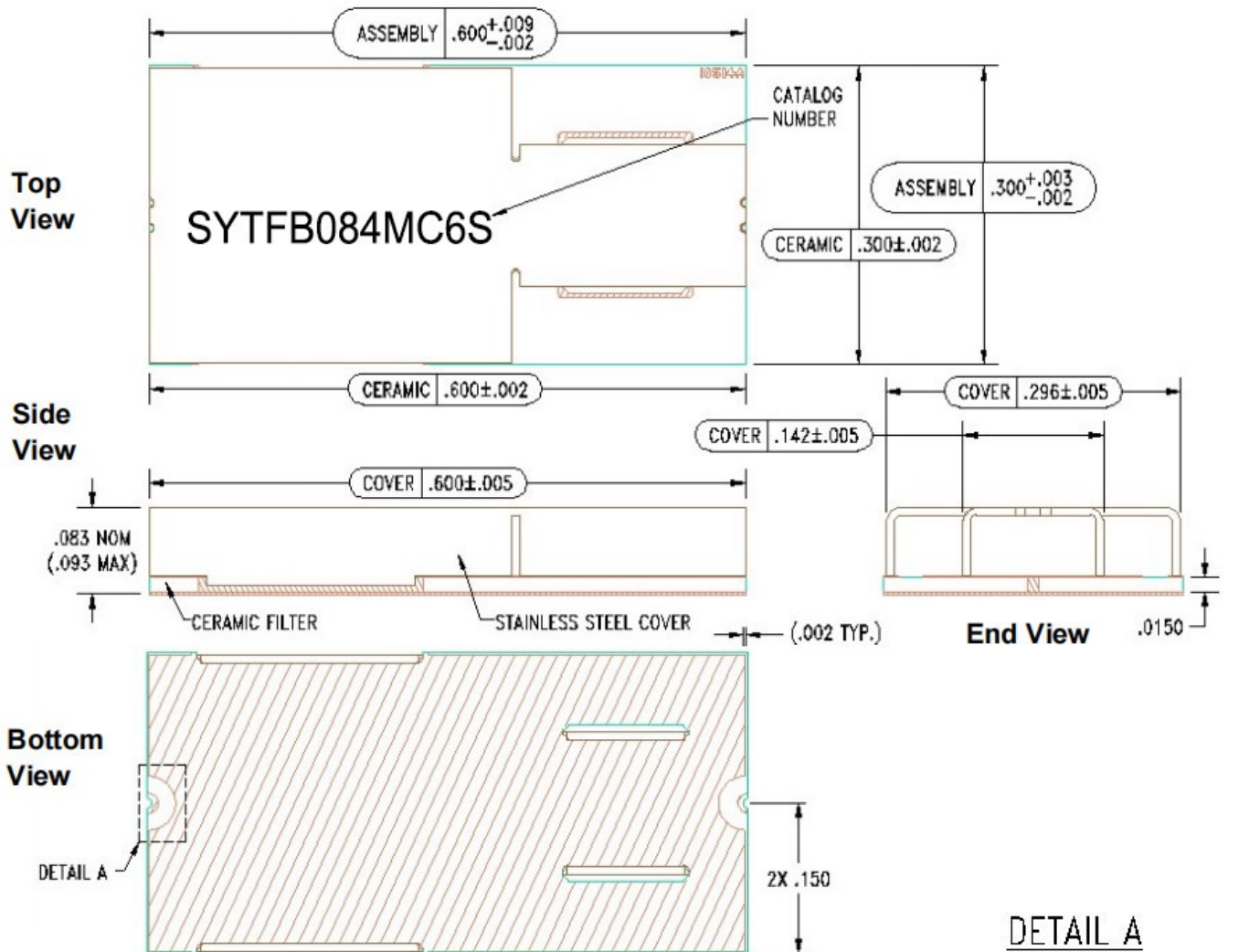
Yantel Corporation
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Tel: 86-755-8355-1886   Fax: 86-755-8355-2533
For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

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Physical Dimensions

Units = inches

ASSEMBLY .600 +.009 / -.002

CATALOG NUMBER

Top View

SYTFB084MC6S

ASSEMBLY .300 +.003 / -.002

CERAMIC .300±.002

CERAMIC .600±.002

Side View

COVER .142±.005

COVER .296±.005

COVER .600±.005

.083 NOM (.093 MAX)

CERAMIC FILTER

STAINLESS STEEL COVER

(.002 TYP.)

End View

.0150

Bottom View

DETAIL A

2X .150

DETAIL A (2 PLACES)

.017

.054 .021 .011

R.006

R.011

R.027

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

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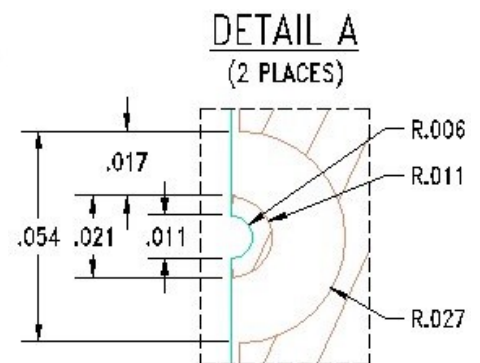
Recommended PCB Layout
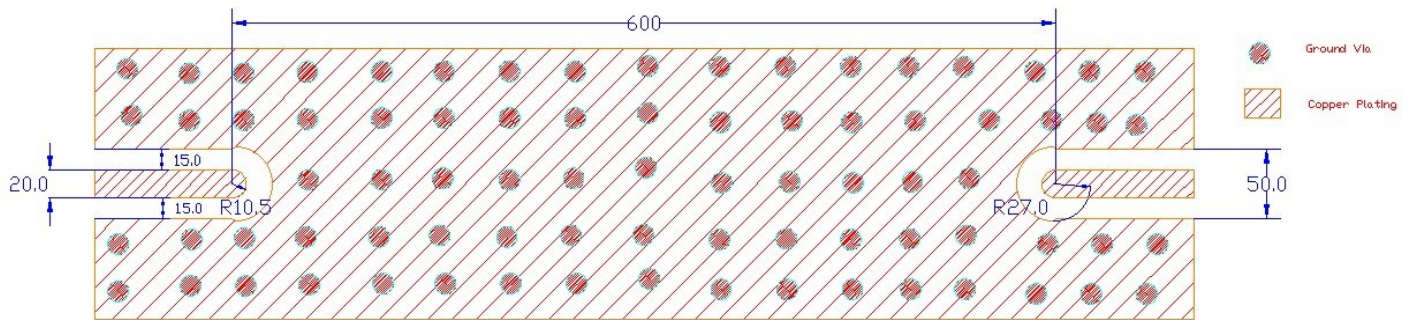
Unit =mils

Note:

● 50Ω trace dimensions are application specific.

● 50Ω trace dimensions are designed for 10mil thick R04350B Rogers Board .

● Ensure adequate grounding beneath the part.