SYTFL090XE6S

9.0 GHz Surface Mount Lowpass Filter

Description

Yantel's surface mount catalog low pass filters utilize Yantel's high dielectric ceramic materials to provide small size and minimal performance variation over temperature. The catalog LPF's are offered with the same footprint in a variety of frequency bands to provide 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)	DC – 9.0		1.5	2.0
Return Loss (dB)		15.0	20.0	
High Side Rejection (dB)	11.0 - 20.0	55.0	60.0	
CW Input Power** (W)	DC - 6.0			10
$\theta_{JC}\left(\frac{°C}{W}\right)$	7.5			
Size (L x W x H)	9.14 x 3.05 x 2.90 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
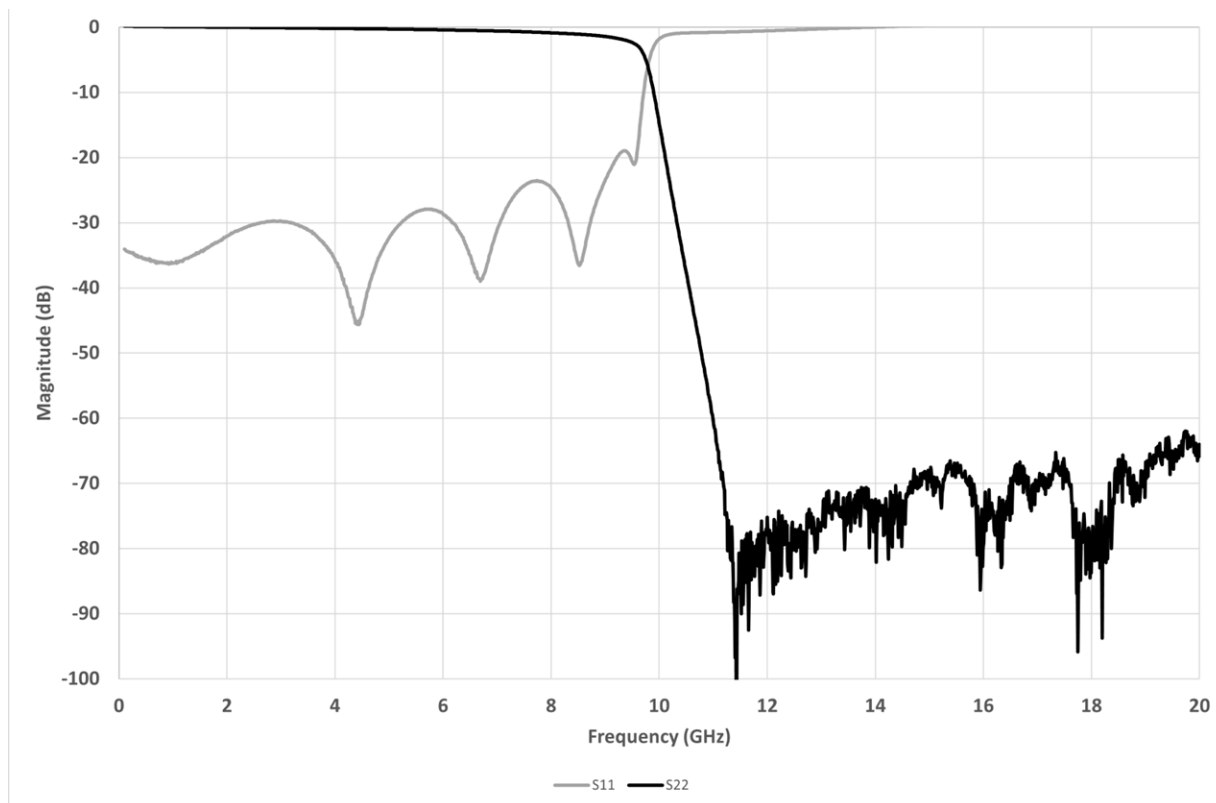
*Typical de-embedded measured performance mounted on a connectorized test fixture. DEB is 0.254mm RO4350B with 50.0Ohm CPW ground traces going into the ports at room temperature.
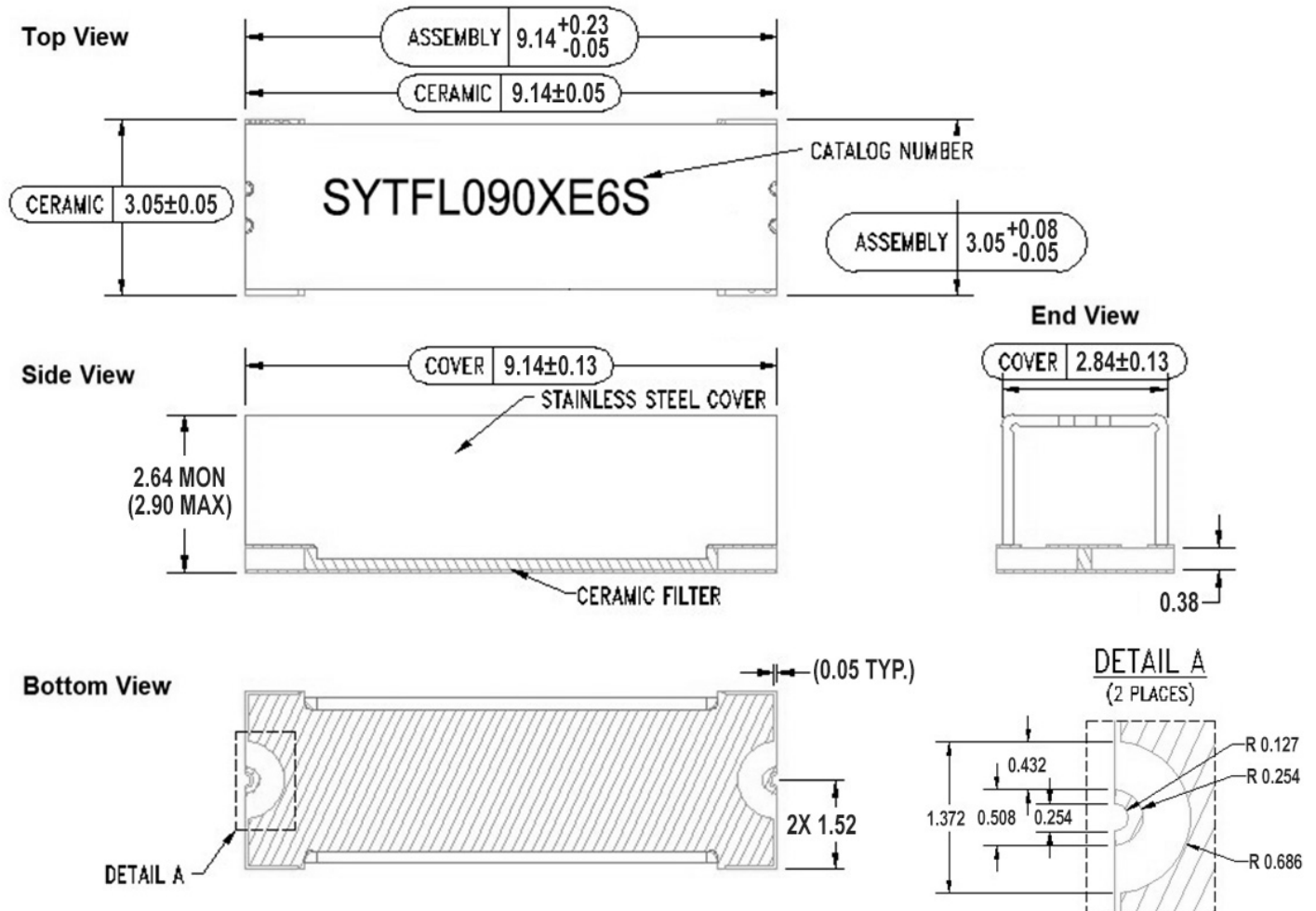
Yantel Corporation
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For detailed performance specs & shopping online see Yantel web site : www.yantel-corp.com

1 / 3

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Physical Dimensions

Units = mm

Top View

| ASSEMBLY | 9.14 $^{+0.23}_{-0.05}$ |
| CERAMIC | 9.14±0.05 |

CERAMIC | 3.05±0.05

SYTFL090XE6S

CATALOG NUMBER

| ASSEMBLY | 3.05 $^{+0.08}_{-0.05}$ |

Side View

COVER | 9.14±0.13

STAINLESS STEEL COVER

2.64 MON
(2.90 MAX)

CERAMIC FILTER

End View

COVER | 2.84±0.13

0.38

Bottom View

(0.05 TYP.)

2X 1.52

DETAIL A

DETAIL A
(2 PLACES)

0.432
1.372 0.508 0.254
R 0.127
R 0.254
R 0.686

Notes :

1. Termination Finish:

   ENIG: 76-152 µm Au over 1270 µm Ni

2. Maximum Assembly Process Temperature: 250°C
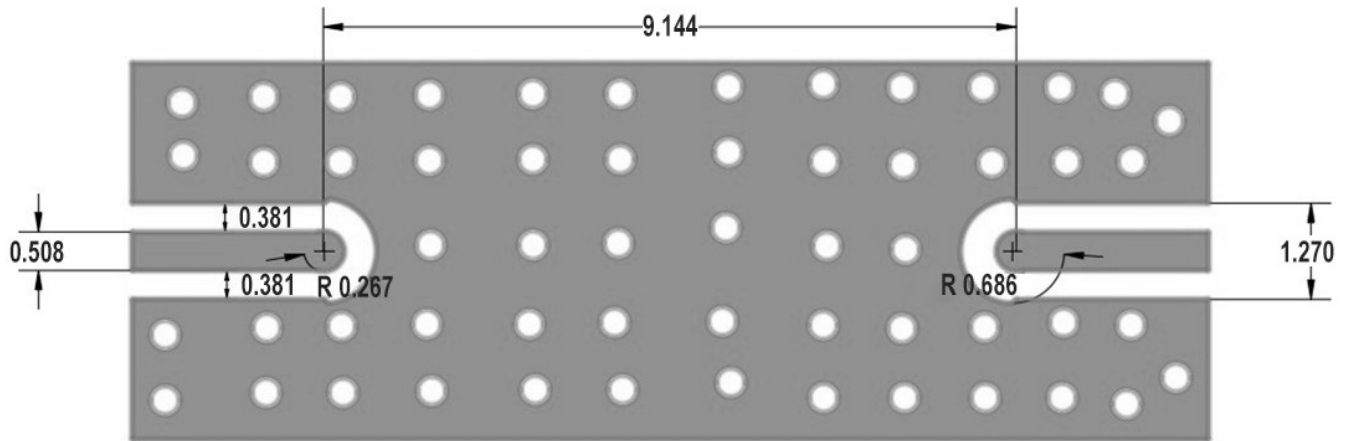
3. Dimension tolerance: ±0.05

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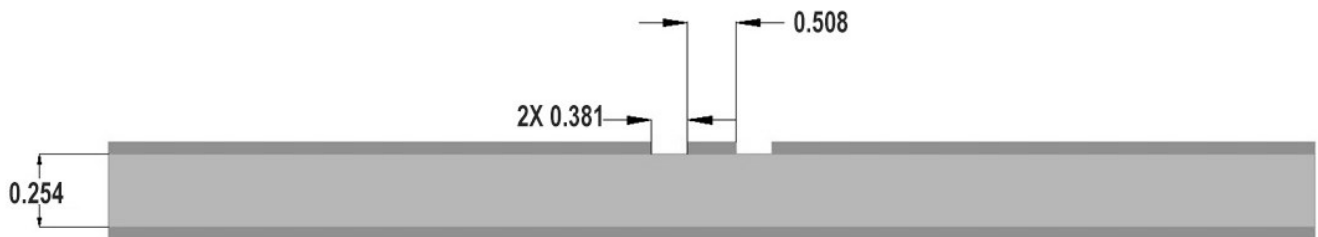
2 / 3

Recommended PCB Layout Unit = mm

Ground Via   PWB Copper

Note:

● 50Ω trace dimensions are application specific.

● 50Ω trace dimensions are designed for 0.254mml thick R04350B Rogers Board.

● Ensure adequate grounding beneath the part.

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3 / 3