

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

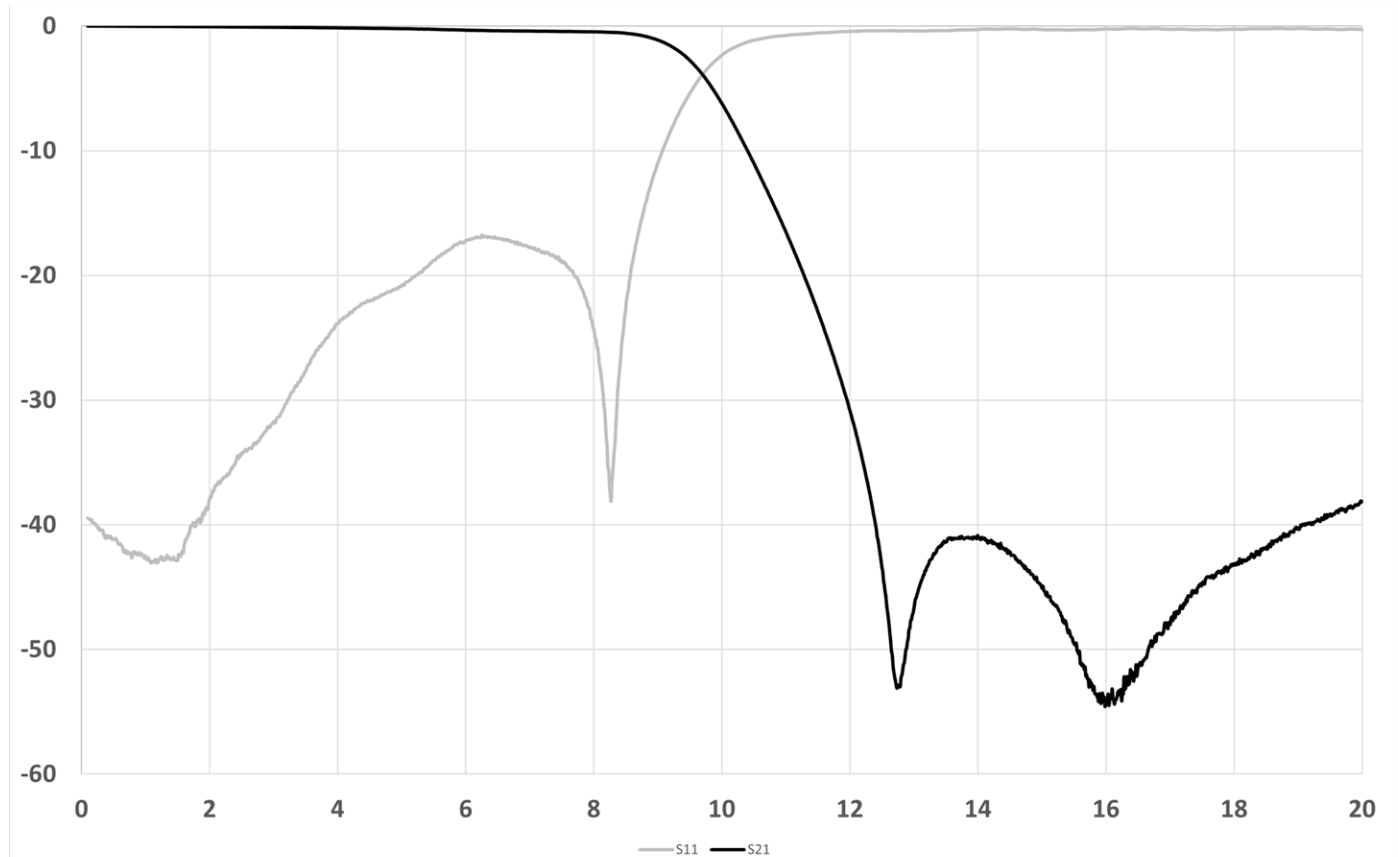
Specifications*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	DC - 9.0		1.0	1.5
Return Loss (dB)		10.0	15.0	
High Side Rejection (dB)	11.0 - 20.0	20.0	25.0	
CW Input Power** (W)	DC - 6.0			10
$\theta_{jc} \left(\frac{^{\circ}\text{C}}{\text{W}} \right)$	7.5			
Size (L x W x H)	0.200 x 0.175 x 0.113 in 5.08 x 4.45 x 2.87 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 50.00ohm CPW ground traces going into the ports at room temperature.

Yantel Corporation

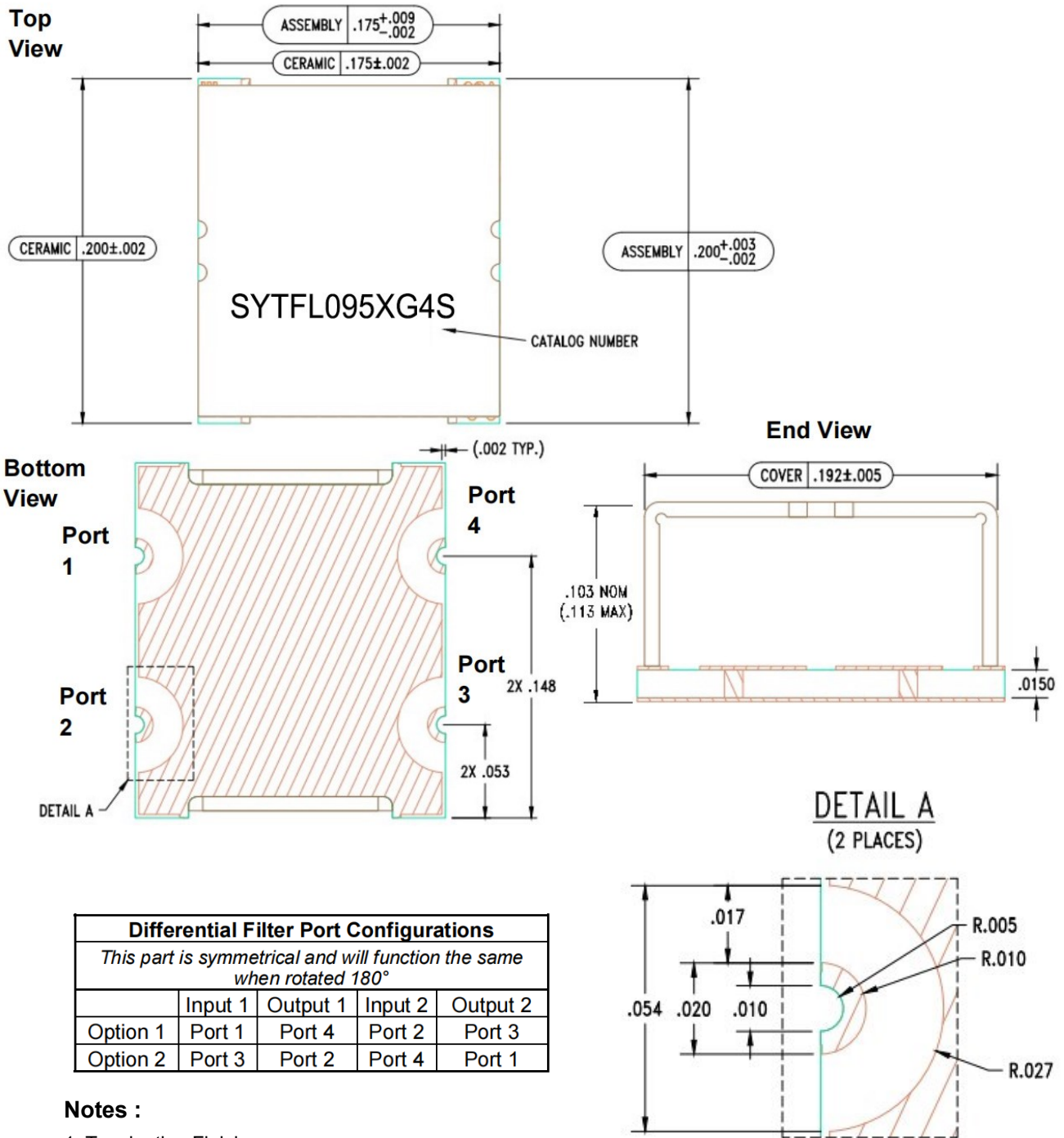
Add: No.308-322,3F,Building 1,Juchuang Jingu Innovation Park,Wenyuan Road 35,Xili Street,Nanshan,Shenzhen,China

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



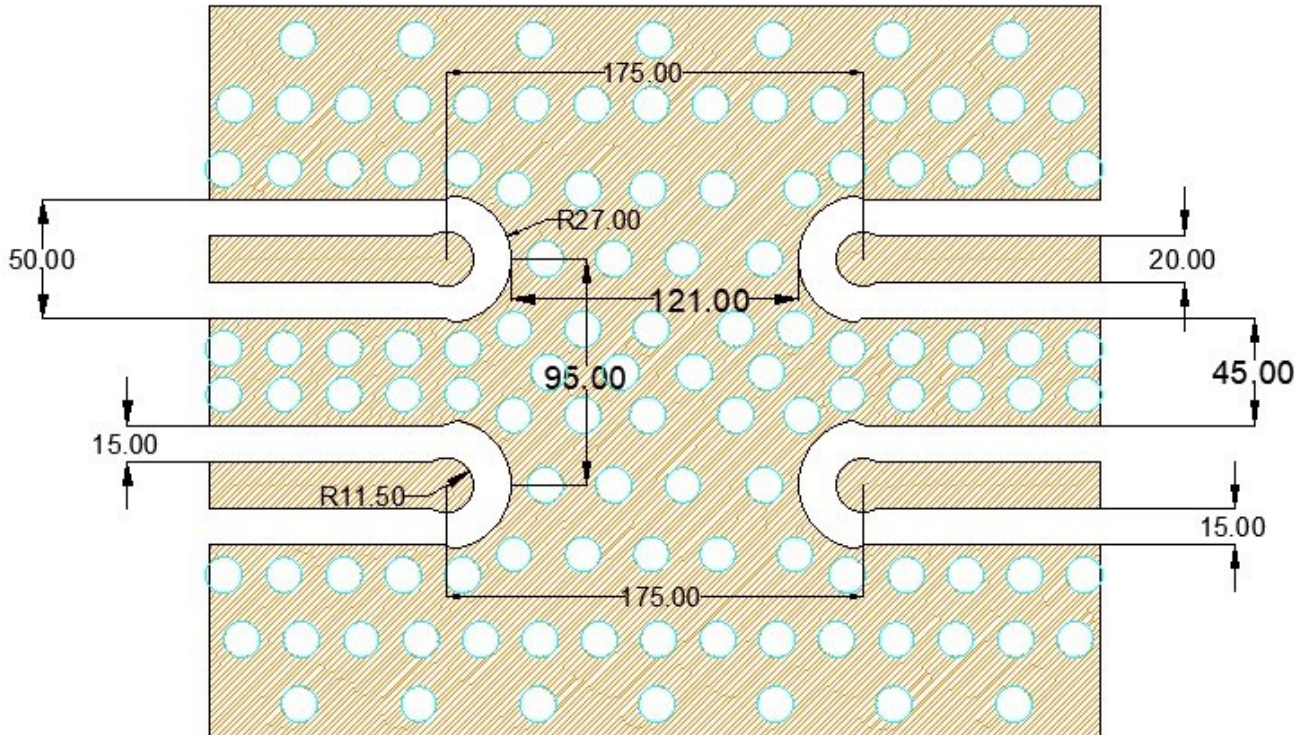
Differential Filter Port Configurations				
<i>This part is symmetrical and will function the same when rotated 180°</i>				
	Input 1	Output 1	Input 2	Output 2
Option 1	Port 1	Port 4	Port 2	Port 3
Option 2	Port 3	Port 2	Port 4	Port 1

Notes :

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

Recommended PCB Layout

Unit = mils



PCB RECOMMENDED STACKUP

Filter is matched to RF layer stackup seen below

Dimensions are specified below in inches (not to scale)

Board material : RO4350b
 Board material design dk : 3.66
 CPWG : 20mil trace width, 15mil gaps

