2 to 4 GHz Bandpass Filter

B028RF2S

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Features

- Small Size
- Fully Shielded Component
- Frequency Stable over Temperature

Description

Surface mount, fully shielded, thin film filter designed for use on PCB 8-12 mils thick with permitivity of 3.0-3.8.

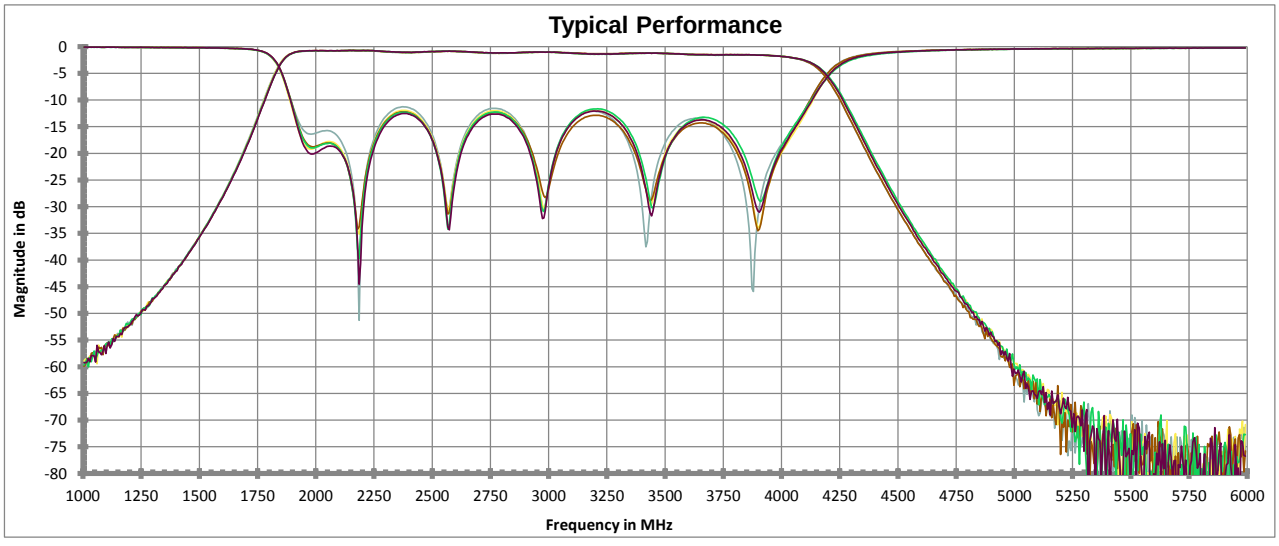
Electrical Specifications

Center Frequency	3000 MHz	
Passband	2000 - 4000 MHz	
Insertion Loss (@Fc)	2.5 dB	@ 25C
	3.0 dB	-40C to +85C
VSWR	1.92:1	2000 MHz to 4000 MHz*
Rejection	40 dB	dc to 1250 MHz
	40 dB	4850 MHz to 6000 MHz
Usable Temp Range	-55 to +125 degree C	

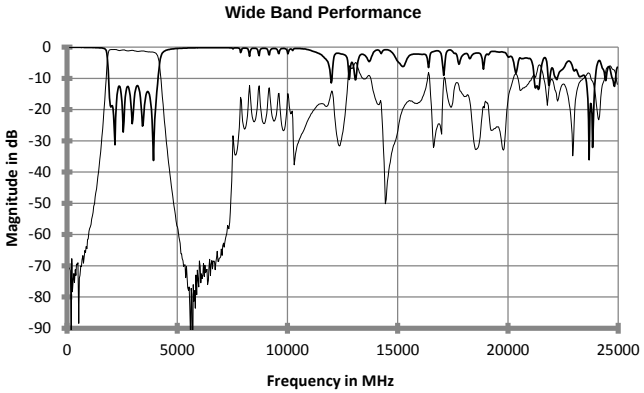
*50 Ohm System

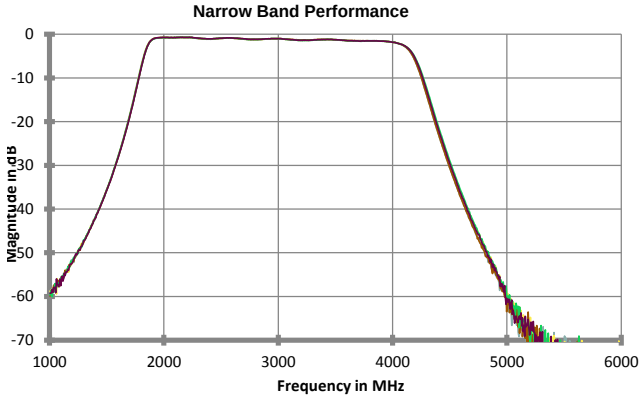
Mechanical

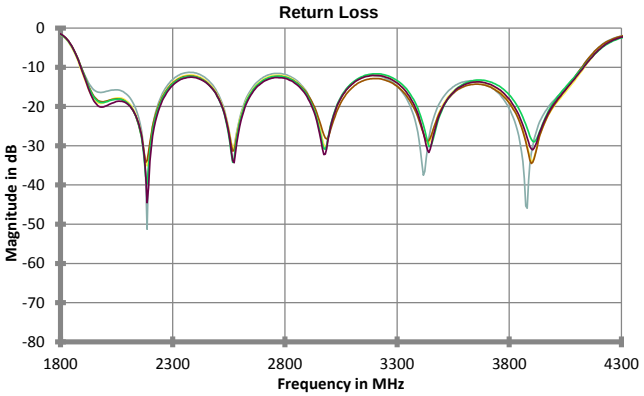
Footprint LxW	0.450 x 0.400 inch	inch
	[11.43 x10.16]	mm
Height	0.113 [2.87]	Inch [mm]

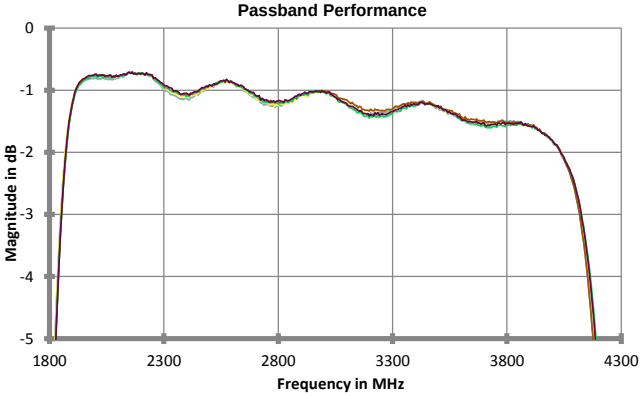


Catalog specifications subject to change without notice

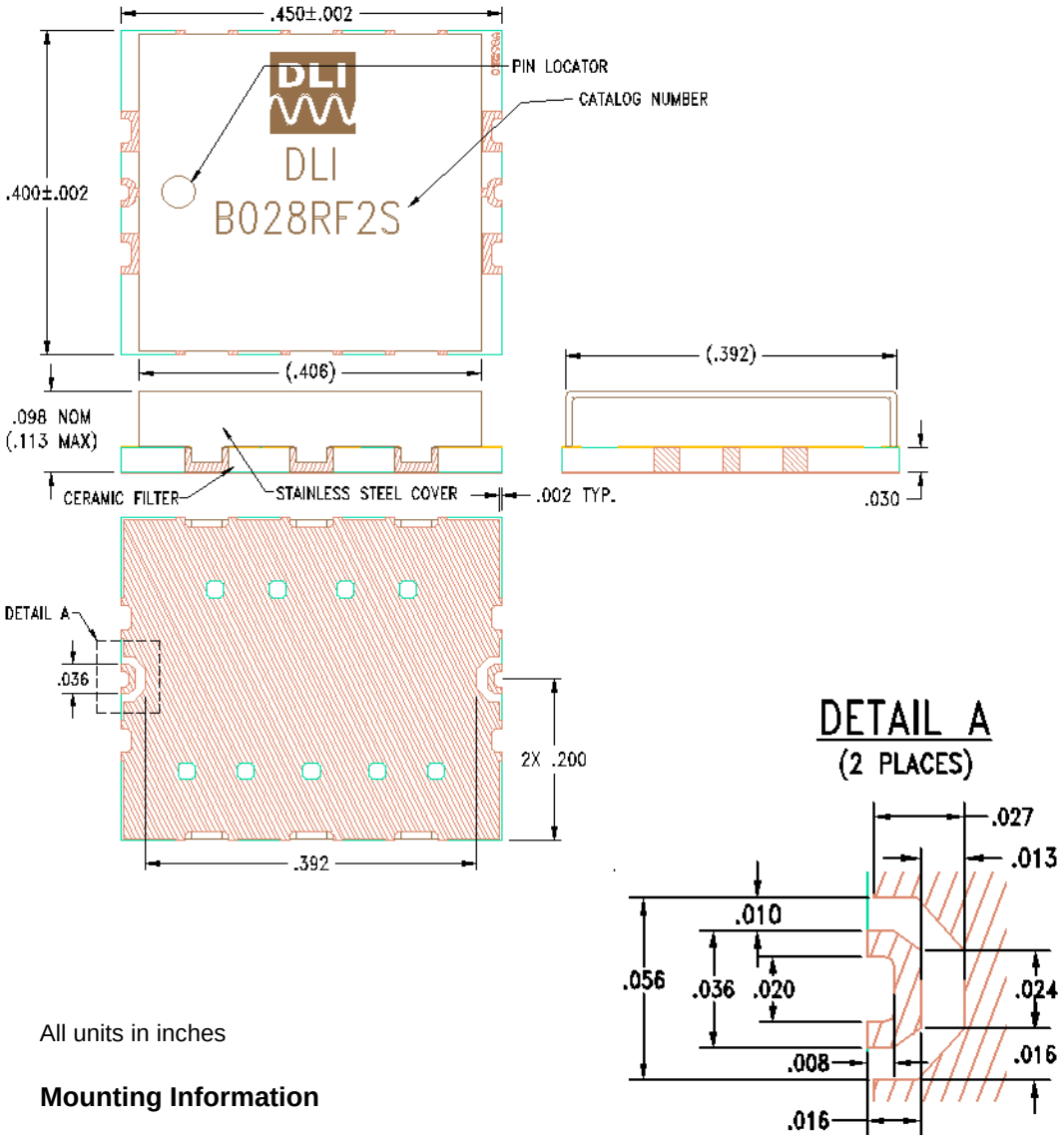

Wide Band Performance
Magnitude in dB
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
0
5000
10000
15000
20000
25000
Frequency in MHz


Narrow Band Performance
Magnitude in dB
0
-10
-20
-30
-40
-50
-60
-70
1000
2000
3000
4000
5000
6000
Frequency in MHz


Return Loss
Magnitude in dB
0
-10
-20
-30
-40
-50
-60
-70
-80
1800
2300
2800
3300
3800
4300
Frequency in MHz


Passband Performance
Magnitude in dB
0
-1
-2
-3
-4
-5
1800
2300
2800
3300
3800
4300
Frequency in MHz

Mechanical Drawing



All units in inches

Mounting Information

PCB ground pattern length and width can be 0.002-0.003 inches larger than filter footprint.
Dimensions of filter launch and PCB launch pattern should be closely matched.
It is suggested that PCB ground metal be pulled back from RF I/O trace to account for component alignment tolerance. Ground via depth and spacing should be set so as not to create any resonances at the frequency of operation.
Reference SMT Filter Mounting application note for additional mounting information.

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