

**12 TO 18 GHZ BANDPASS FILTER****AFL05158****FEATURES**

- Small Size
- Fully Shielded Component
- Frequency Stable over Temperature -55°C to +125°C

**DESCRIPTION**

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

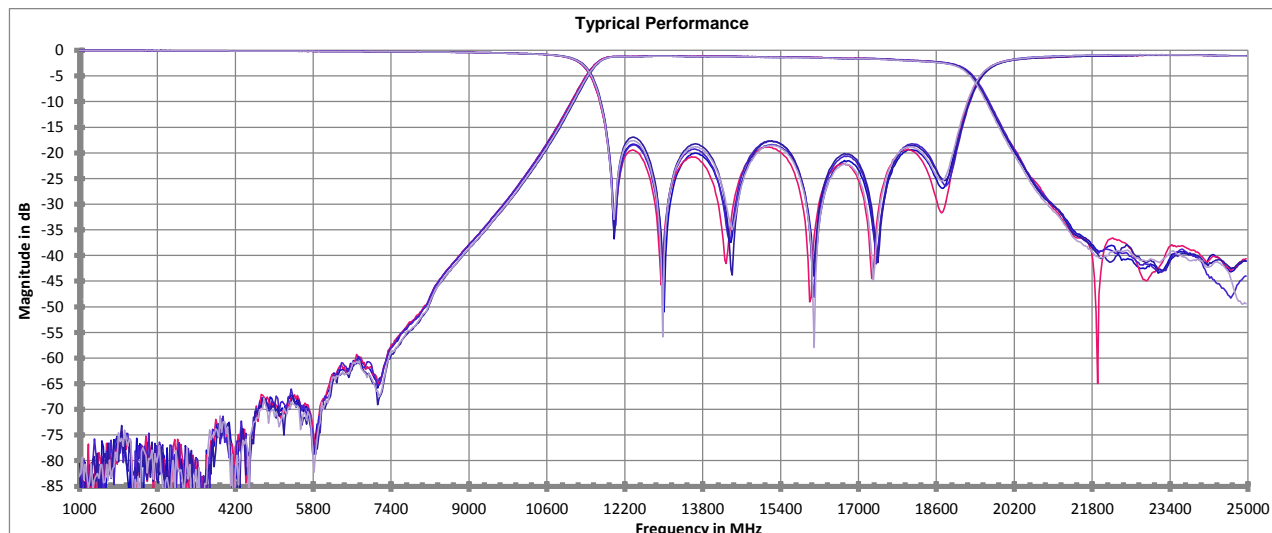
Applications include Ku-Band, Radar and Military Communications.

**Electrical Specifications**

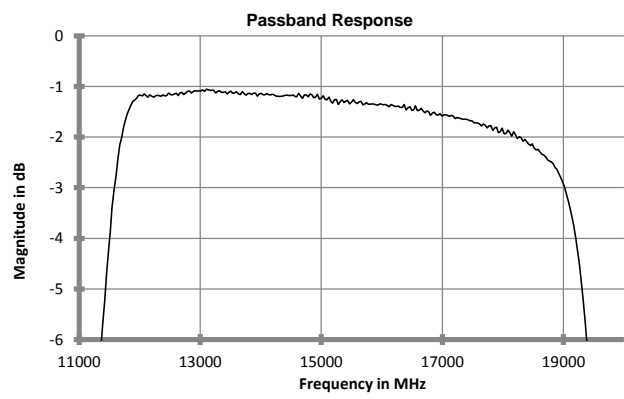
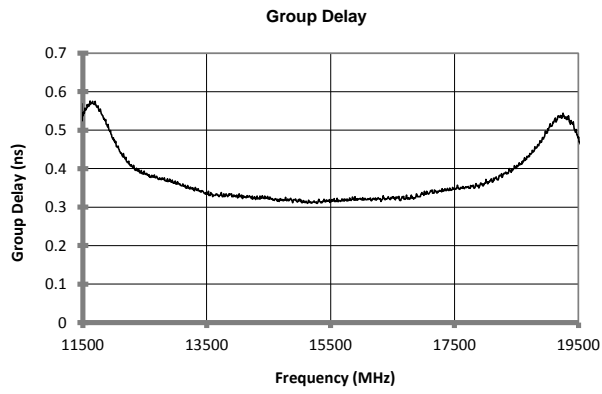
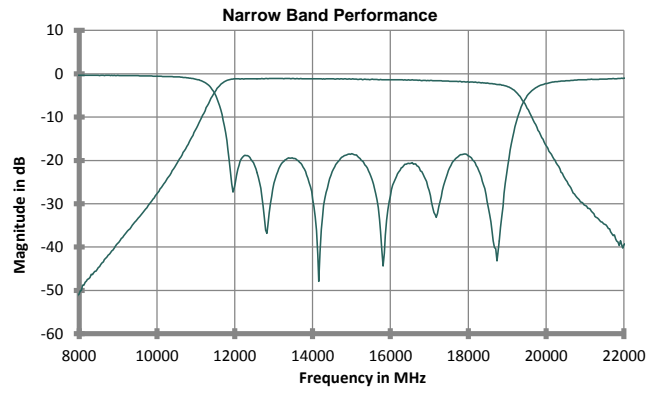
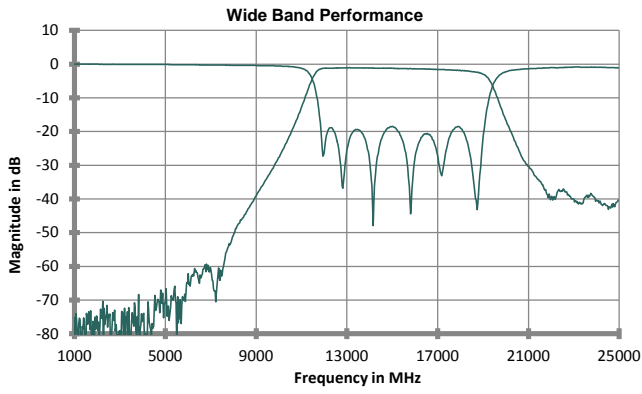
Center Frequency	15000 MHz	
Passband	12000 - 18000 MHz	
Insertion Loss (@Fc)	3.1 dB	@ 25°C
	3.6 dB	-40°C to +85°C
VSWR	1.67:1	12000 MHz to 18000 MHz*
Rejection	40 dB	dc to 7600 MHz
	30 dB	22500 MHz to 25000 MHz
Usable Temp Range	-55 to +125 degree C	
*50 Ohm System		

**Mechanical**

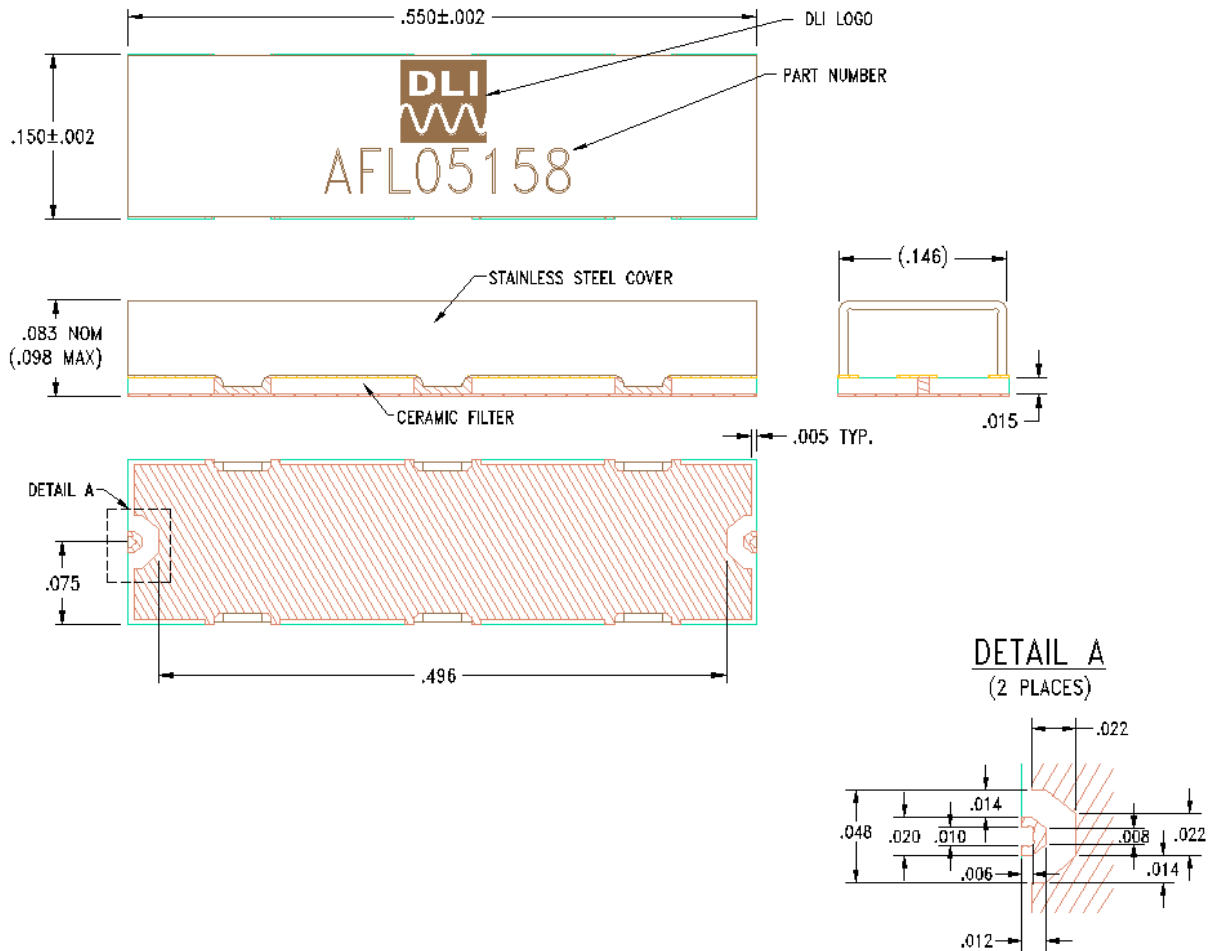
Footprint LxW	0.550 x 0.150	inch
	[13.97 x 3.81]	mm
Height	0.098 [2.49]	Inch [mm]



Catalog specifications subject to change without notice



**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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