



### Suspended Substrate Stripline Low Pass Filter DC - 12GHz



#### Features

- SSS Filter - Suspended Substrate Stripline Filter
- Flat frequency response and low insertion loss
- Covers the DC to 18GHz Frequency Range
- Wide bandwidth and 3dB BW Available from 5-50% ( $f_0$ )
- Designs that Cover up to 40 GHz Also Available
- MIL-E-5400 standard

#### Electrical Specifications, $T_A = +25^\circ\text{C}$

Parameters		Min.	Typ.	Max.	Units
Frequency Range		DC		12	GHz
Insertion Loss			0.8	1.0	dB
Pass Band Ripple			0.5	0.8	dB
VSWR			1.4	1.6	: 1
Rejection	@13.8-18.5GHz	50	60		dB
Power Rating	Average			15	W
	Peak			100	W
Impedance		50			Ohms
Weight		0.71			Ounces
Input / Output Connectors		SMA-Female			
Material		Aluminum			
Finish		Blue Paint			

#### Environmental Specifications

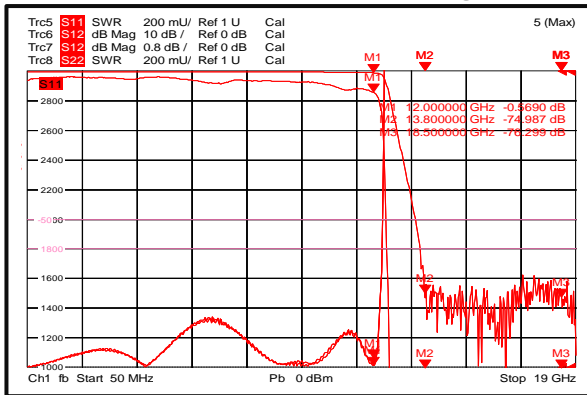
Operational Temperature ( $^\circ\text{C}$ )	-45 ~ +85
Storage Temperature ( $^\circ\text{C}$ )	-55 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at $35^\circ\text{C}$ , 95%RH at $40^\circ\text{C}$
Shock	20G for 11msec half sine wave, 3 axis both directions

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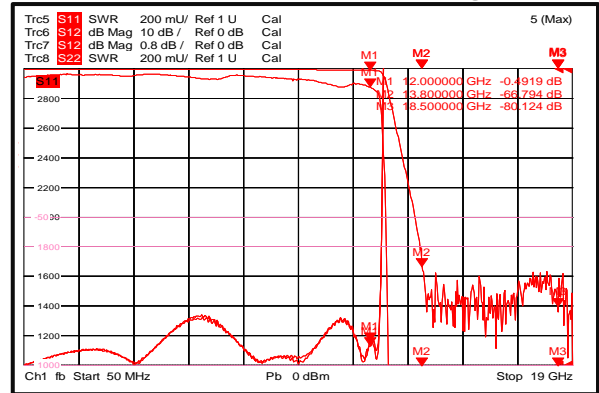


**Typical Performance Plots**

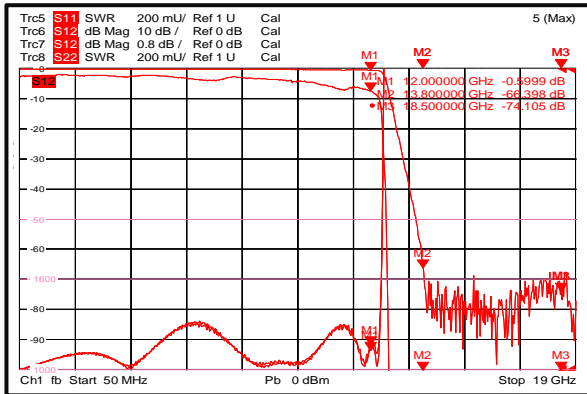
**Loss vs. Ripple vs. Rejection vs. VSWR @+25°C**



**Loss vs. Ripple vs. Rejection vs. VSWR @-45°C**



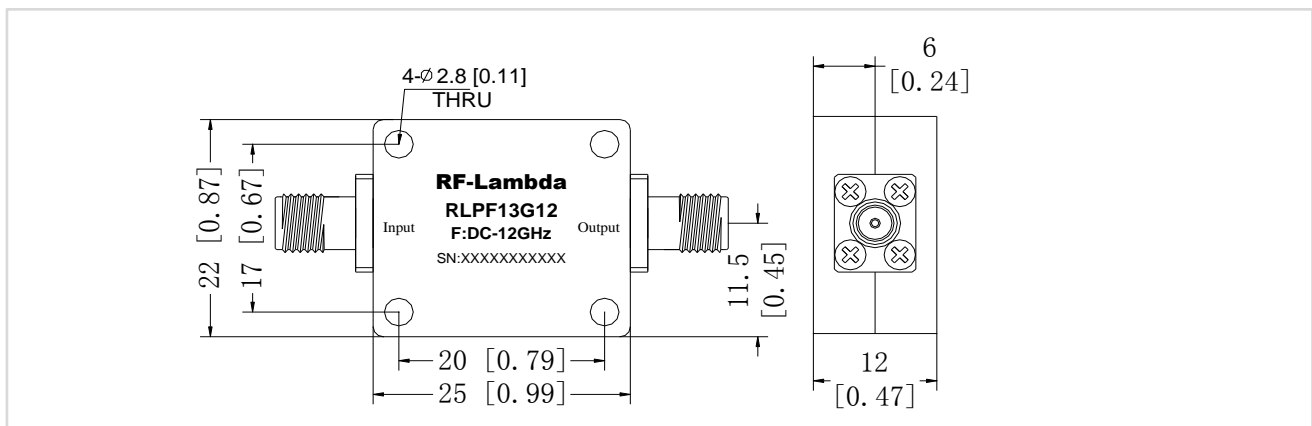
**Loss vs. Ripple vs. Rejection vs. VSWR @+85°C**



**Outline Drawing:**

All Dimensions in mm [inches]

Tolerance  $\pm 0.2$  [0.008]



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