

## Coaxial Cavity Band Pass Filter 23 - 30GHz



### Features

- High Rejection
- Low Insertion Loss
- Excellent Temperature Stability
- Filter Type: Cavity
- Bi-Directional

### Typical Applications

- Wireless Infrastructure
- Test and Measurement
- Military and Aerospace

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

Parameters		Min.	Typ.	Max.	Units
Passband Frequency Range		23		30	GHz
Passband Insertion Loss			1.0	2.5	dB
Passband Return loss		10	13		dB
Rejection	@10-15GHz	40	85		dBc
	@34-50GHz	40	45		dBc
Power Rating (CW)				1	W
Impedance		50			Ohms
Weight		1.8Max.			ounces
Input / Output Connectors		2.4mm-Female / 2.4mm-Male			
Material		Copper			
Finish		Blue Paint			

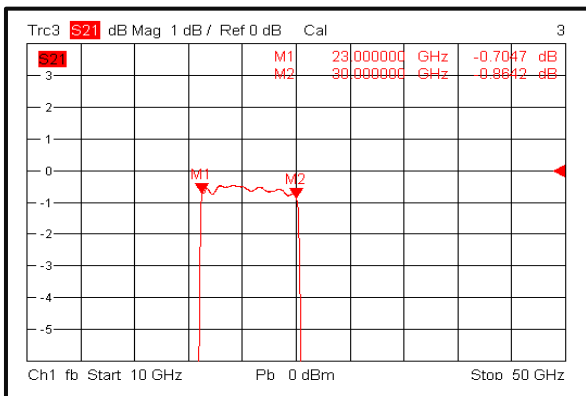
**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	5°C~+45°C (Case Temperature)
Storage Temperature	-25°C~+55°C
Thermal Shock	5°C → +45°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +45°C for 72 Hours
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

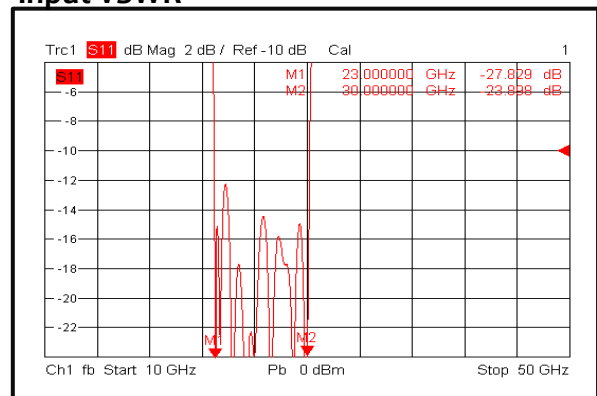
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**Typical Performance Plots**

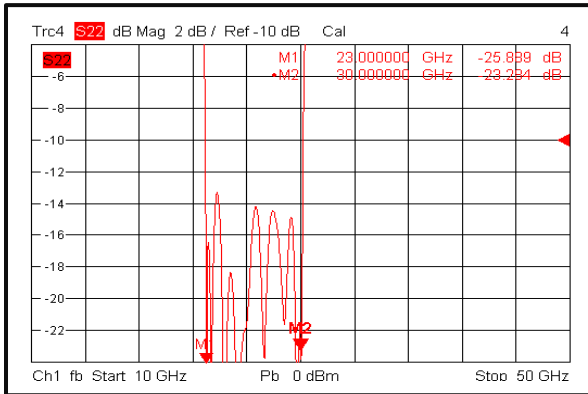
**Insertion Loss**



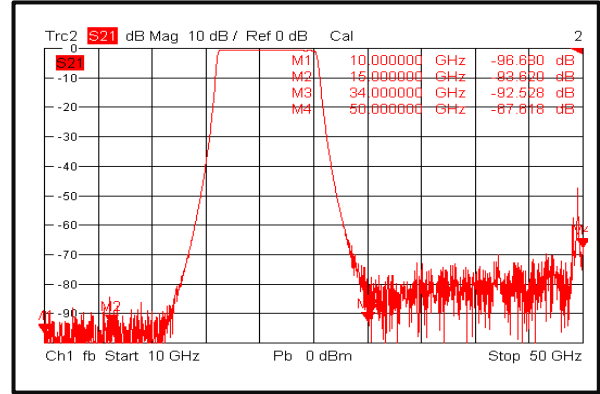
**Input VSWR**



**Output VSWR**



**Rejection**

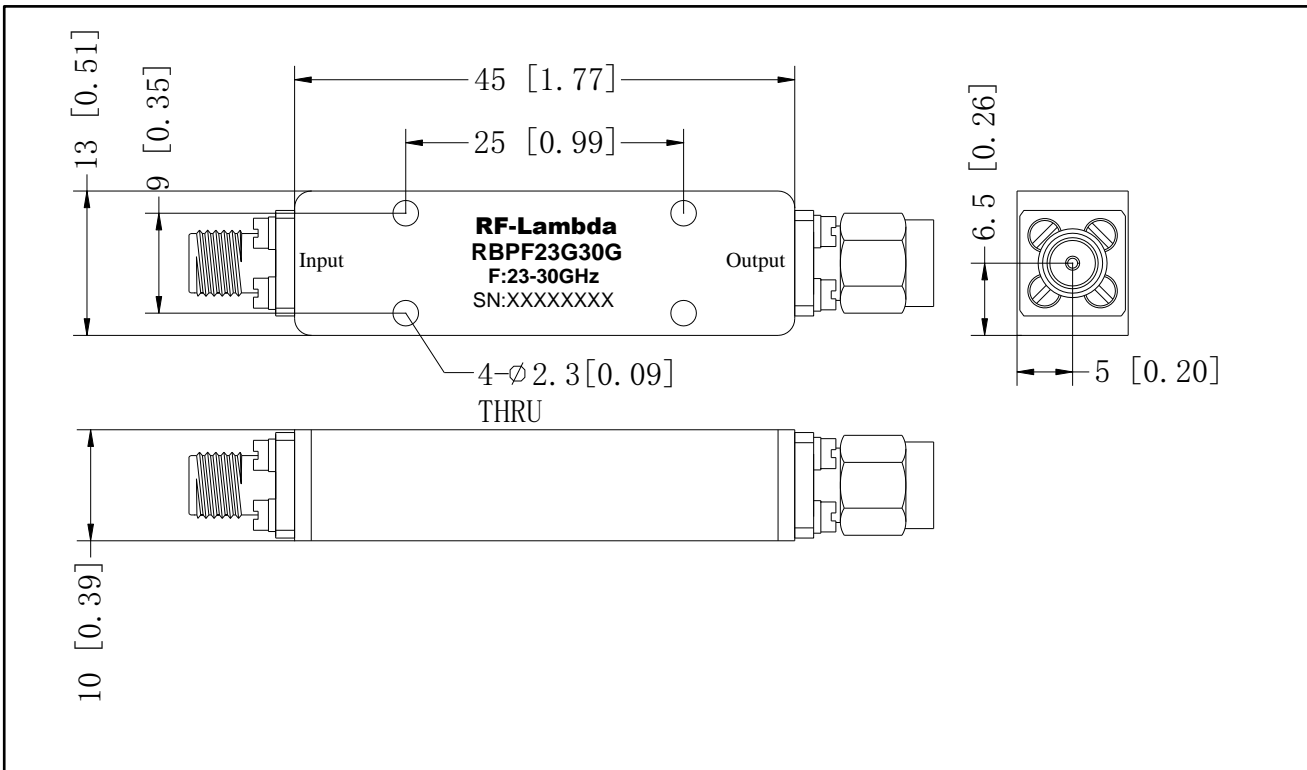


**Outline Drawing:**

All Dimensions in mm [inches]

Outline Tolerances  $\pm 0.5[0.02]$

Mounting Holes Tolerances  $\pm 0.2[0.008]$



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