

Tube Low Pass Filter DC-12GHz



Note: Photo is for illustration purposes only.
Please refer to outline drawing.

Features

- Tube Low Pass Filter
- Flat frequency response
- Low insertion loss

Product Description

RLPFTBG12 is Tube Low Pass Filter with a frequency range of DC to 12GHz.

The peak power of this low pass filter is 60W. The insertion loss is 0.4dB with a typical rejection of 60dB.

The working temperature of this product is between - 40°C and + 85°C.

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

Electrical Specifications, TA = +25°C

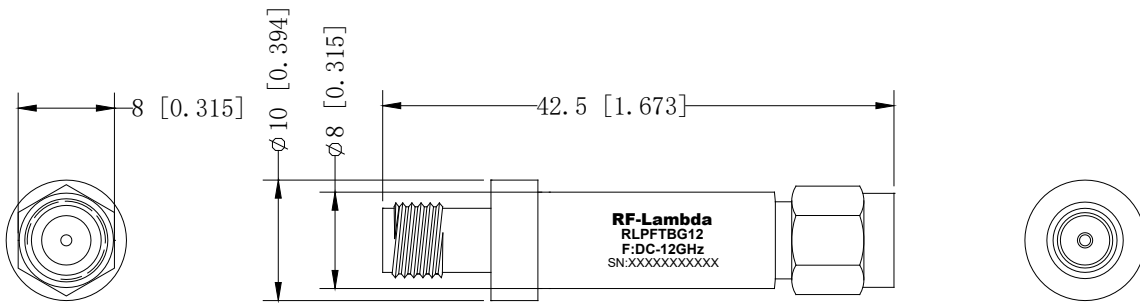
Parameter	Min	Typ	Max	Units
Frequency Range	DC		12	GHz
Insertion Loss		0.35	0.4	dB
VSWR		1.2	1.25	: 1
Rejection	@24GHz	60	62	dB
Power Rating	Average		60	W
	Peak (10% Duty Cycle, 1 us Pulse Width)		500	W
Weight		Max.		lbs
Impedance		50		Ω
Input / Output Connectors	SMA-Female(Input) – SMA-Male(Output)			
Package	Epoxy Sealed (Standard)			
	Hermetically Sealed (Optional)			

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
*Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
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)

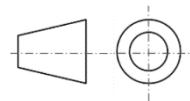
*For vibration testing details please see additional information section.

Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: Blue Painted
3. All dimensions are in millimeters [inches].
4. Outline Tolerances ± 0.5 [0.02], Mounting Hole Tolerances ± 0.2 [0.008] unless otherwise specified.



Additional Information

Documentation	Webpage
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RLPFTBG12	Input Connector SMA-Female and Output Connector SMA-Male	DC-12GHz Tube Low Pass Filter

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