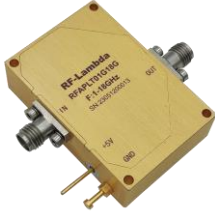


Input Over Drive Front End Protector 1GHz-40GHz



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

Product Description

RFAPLT01G40G is an input over drive front end protector with a frequency range of 1 to 40GHz.

The maximum input power of the limiter is 23dBm. The typical insertion loss is 3.0dB with a flat leakage of -15dB.

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

Features

- Wide Band Operation 1-40GHz
- Active, High Isolation Limiter
- Low Insertion Loss
- High Power Handle Capability up to 23dBm

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 (T_A=+25°C)

Parameter	Min	Typ	Max	Units
Frequency Range	1		40	GHz
CW Input Power			23	dBm
Peak Power (Pulsed, 5% Duty Cycle, 1us pulse width)			30	dBm
Insertion Loss		4.0		dB
VSWR		2.0		: 1
Flat Leakage Power at PIN = 23 dBm		-20	-15	dBm
Peak Power Leakage		-17		dBm
Voltage		+5		V
Current		200		mA
Weight		/		lbs.
Input / Output Connectors	2.92mm-Female(Input)-2.92mm-Female(Output)			
Package	Epoxy Sealed (Standard)			
	Hermetically Sealed (Optional)			

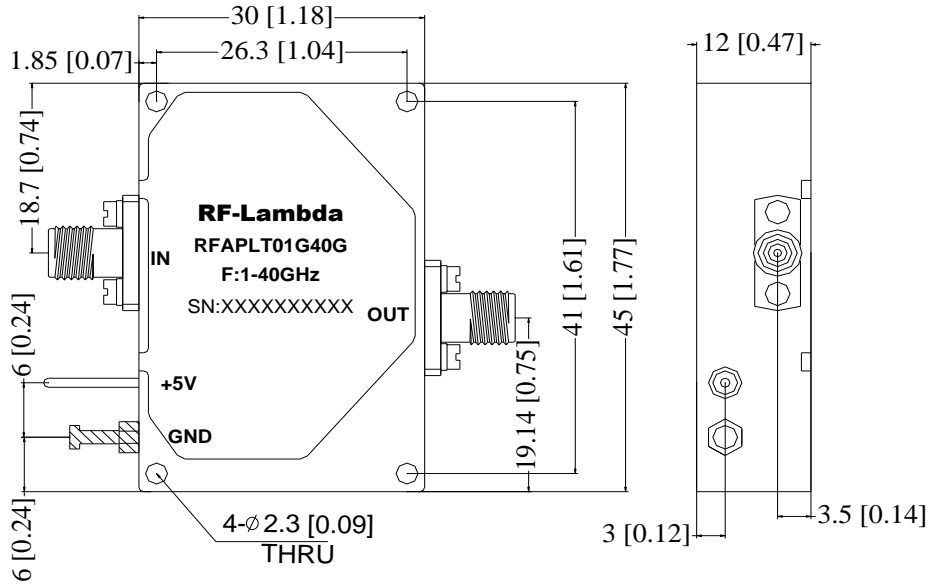
Absolute Maximum Ratings

Parameter	Rating
Voltage	+5.5V
RF Input Power (CW)	+23dBm

Environmental Specifications and Test Standards

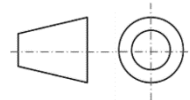
Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for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

Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Housing Tolerances ± 0.1 [0.004] unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
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
RFAPLT01G40G	Input connector 2.92mm-Female and Output connector 2.92mm-Female	1GHz-40GHz Power Limiter

Important Notice

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