Input Over Drive Front End Protector 26GHz-40GHz

Product Description

RFAPLT26G40G is an input over drive front end protector with a frequency range of 26 to 40GHz.

The maximum input power of the limiter is 10W. The typical insertion loss is 2dB with a flat leakage of -17dBm.

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

Features

- Wide Band Operation 26-40GHz
- Active, High Isolation Limiter
- Low Insertion Loss
- High Power Handle Capability up to 10W

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=+25ºC)

Parameter		Min	Typ	Max	Units
Frequency Range		26		40	GHz
CW Input Power				40	dBm
Peak Power Handling (pulsed : PW = 100 us, Duty Cycle = 10%)				41.2	dBm
Insertion Loss			3.0	3.8	dB
VSWR			1.5	1.8	: 1
Flat Leakage Power at PIN > 30 dBm			-17	-15	dBm
Peak Power Leakage			-15	-12	dBm
Voltage			+5		V
Current			200 Typ.		mA
Weight	Net		0.25 Max.		lbs.
	Including Heat Sink		0.4 Max.		
Input / Output Connectors			2.92mm-Female(Input)-2.92mm-Female(Output)		
Package			Epoxy Sealed (Standard)		
			Hermetically Sealed (Optional)		

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Absolute Maximum Ratings

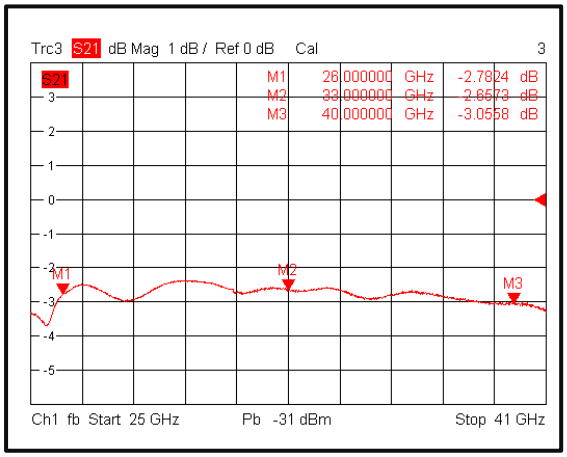
Parameter	Rating
Voltage	+5.5V
RF Input power(CW)	+41dBm (25℃)

Environmental Specifications and Test Standards

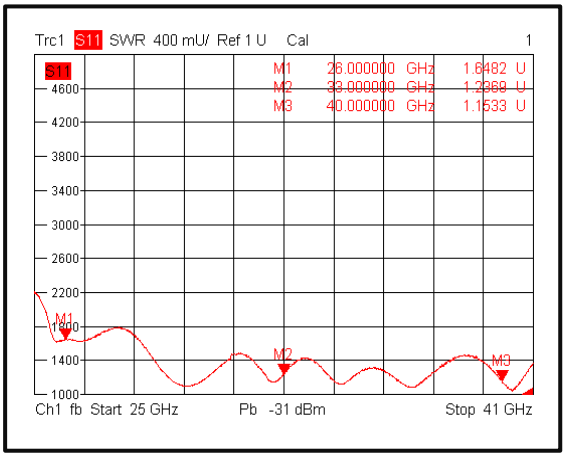
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-50ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85ºC for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

Typical Performance Plots

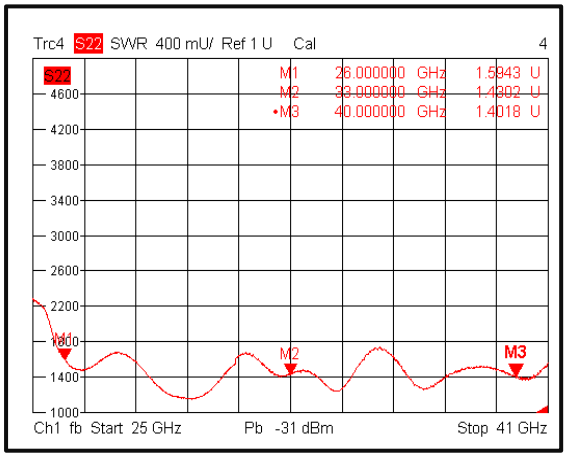
Insertion Loss @+25℃



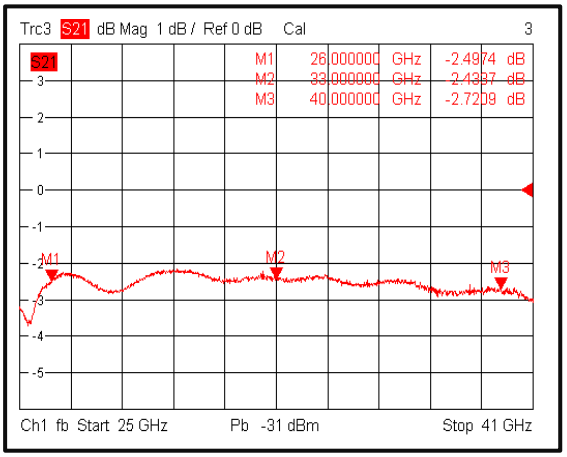
Input VSWR @+25℃



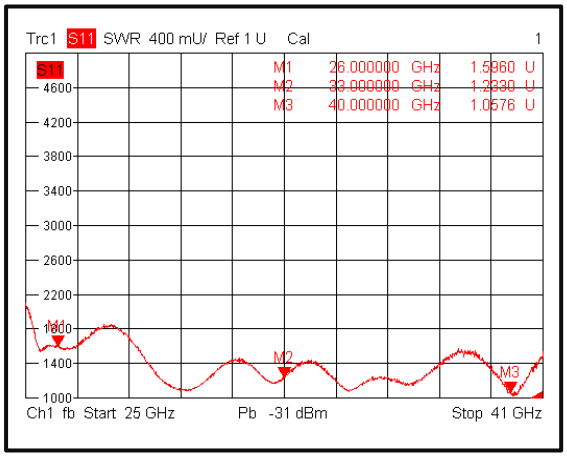
Output VSWR @+25℃



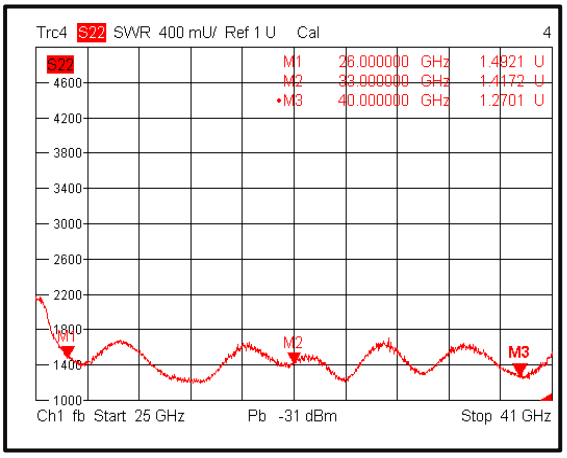
Insertion Loss @-40℃



Input VSWR @-40℃

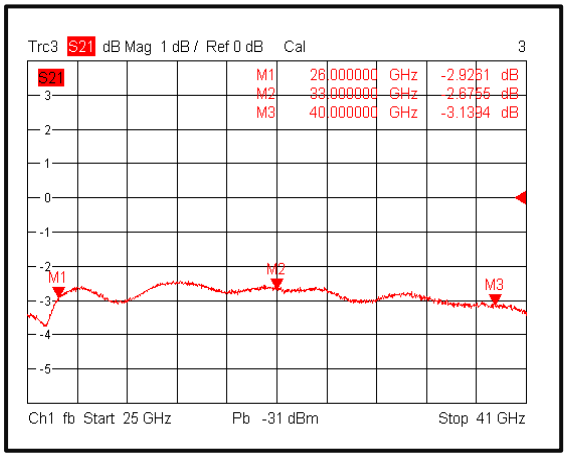


Output VSWR @-40℃

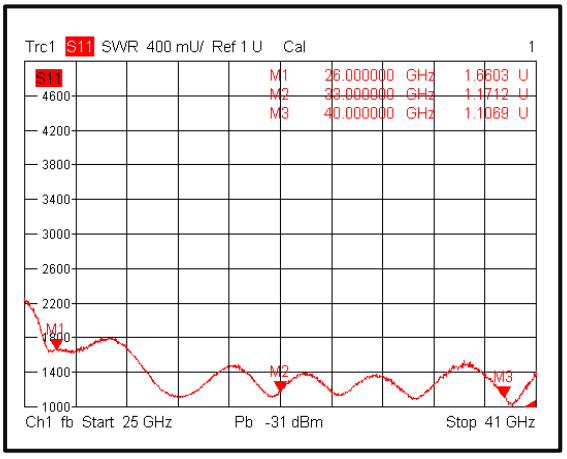


Typical Performance Plots

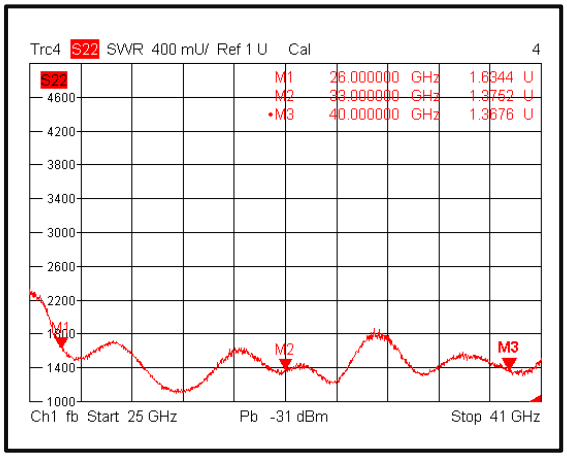
Insertion Loss @+85℃



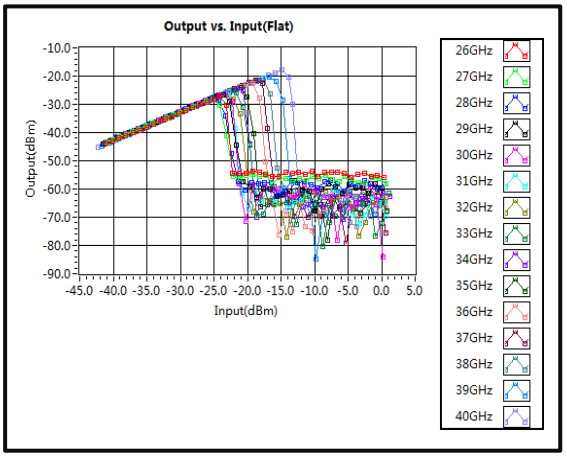
Input VSWR @+85℃



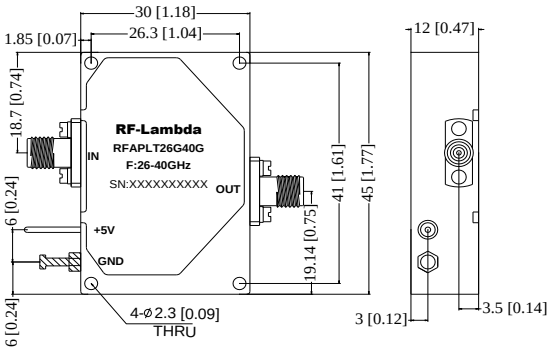
Output VSWR @+85℃

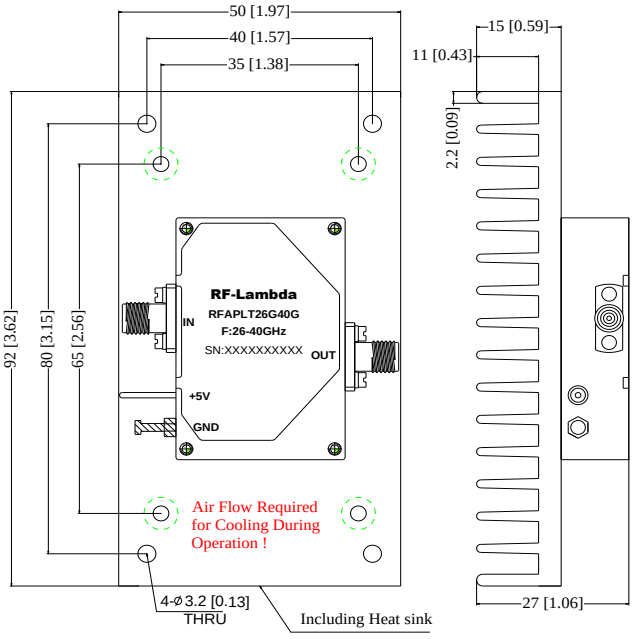


Flat Leakage Power



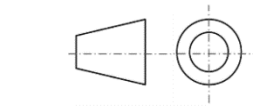
Outline Drawing





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. Heatsink Required - Mandatory for High Power Operation .Matching heatsink is listed on our website. If customer would like to use their own cooling method, please make sure the amplifier will operate under the specs that listed in page 2 of this datasheet.
6. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
Heatsink Lookup Specifications	https://rflambda.com/search_heatsink.jsp
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
RFAPLT26G40G	Input connector 2.92mm-Female and Output connector 2.92mm-Female	26GHz-40GHz Power Limiter

Important Notice

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