Wide Band Power Limiter
1GHz-26GHz

Product Description

RFPLT01G26GE is a wideband power limiter with a frequency range of 1 to 26GHz.

The max input Power of the limiter is 10W. The typical insertion loss is 2.5 dB and flat Leakage at > 25dBm input is 14dB.

The power limiter's connectors are SMA-female.

The operating temperature of this product is -40 to +85ºC.

Features

- Passive, High Isolation Limiter
- Low Insertion Loss and Good Return Loss
- High Power Handling 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	Min	Typ	Max	Units
Frequency Range		1 - 4			4 - 26		GHz
CW Input Power		25	27		25	27	dBm
Peak Power Handling (1.0 µs pulse width, 1% duty cycle, ≤15 ns rise time)			45			45	dBm
Insertion Loss		1	1.5		2.5	3.5	dB
VSWR		1.5	2		1.6	2	: 1
Flat Leakage Power		15	17		14	15	dBm
Peak Power Leakage		18	19		16	17	dBm
Weight			0.028 Max.				lbs.
Input / Output Connectors			SMA-Female(Input)-SMA-Male(Output)				
Package			Epoxy Sealed (Standard)				
			Hermetically Sealed (Optional)				

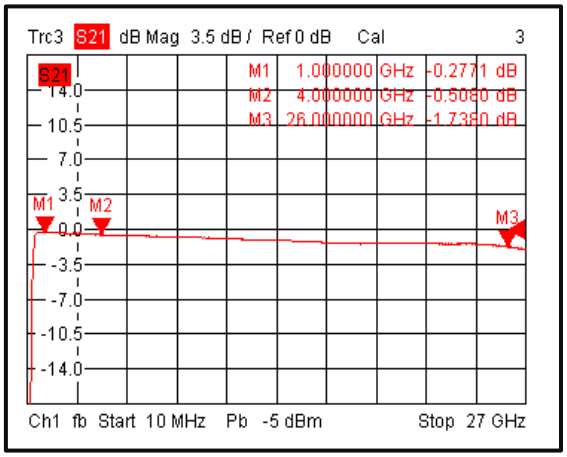
RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com

Environmental Specifications and Test Standards

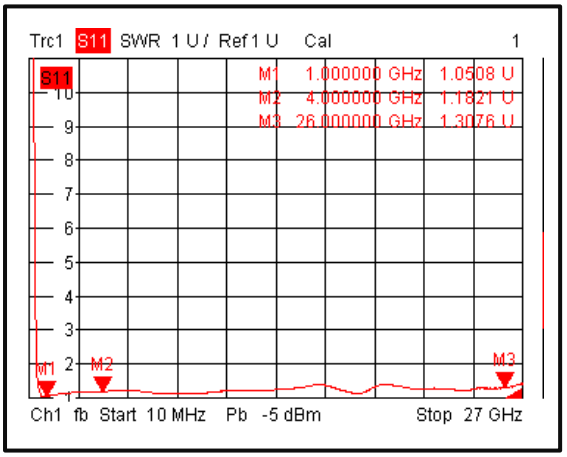
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-50ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85ºC for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

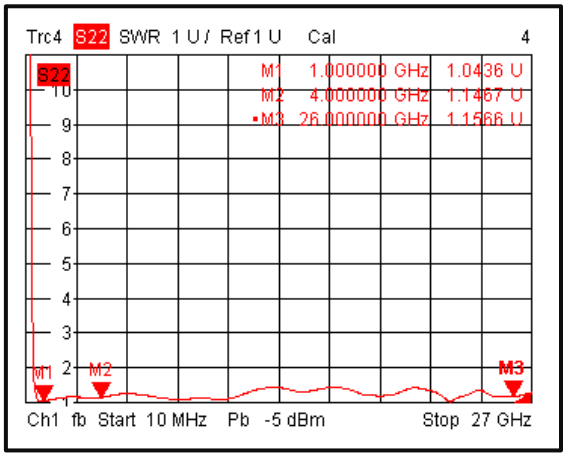
Insertion Loss @+25℃



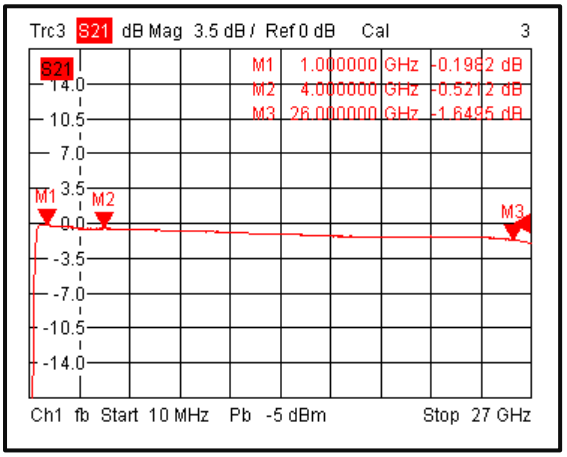
Input VSWR @+25℃



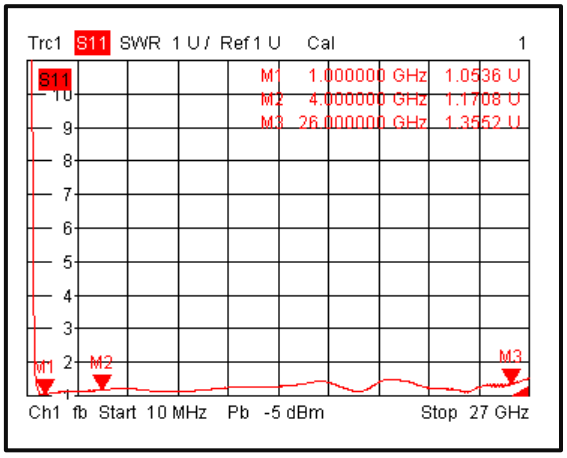
Output VSWR @+25℃



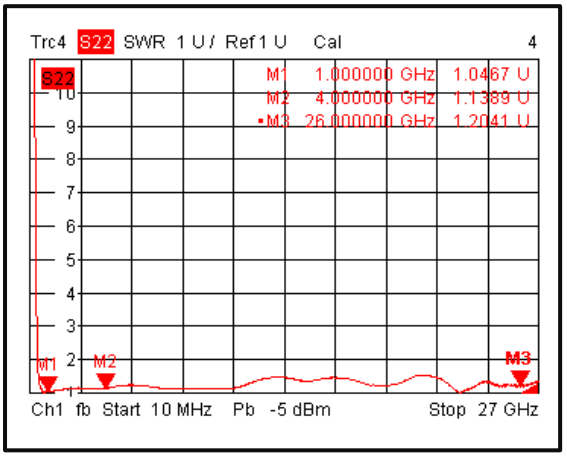
Insertion Loss @-40℃



Input VSWR @-40℃

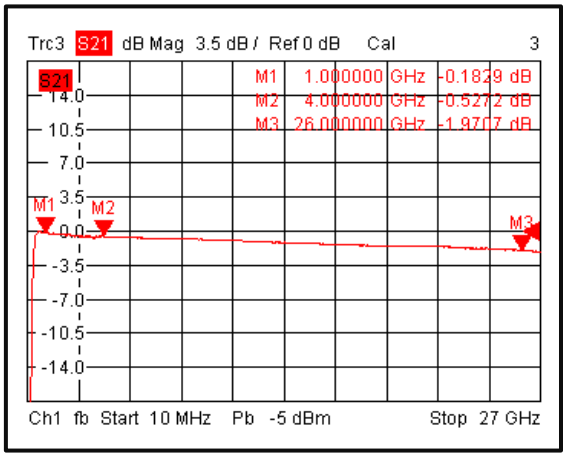


Output VSWR @-40℃

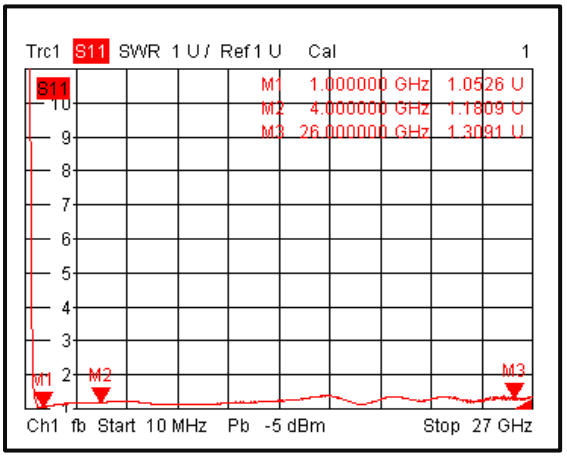


Typical Performance Plots

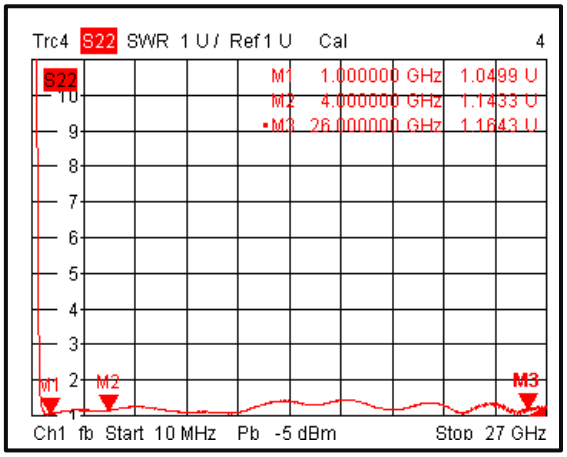
Insertion Loss @+85℃



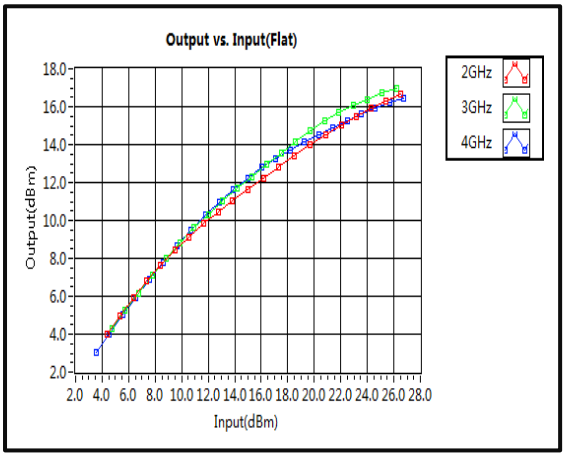
Input VSWR @+85℃



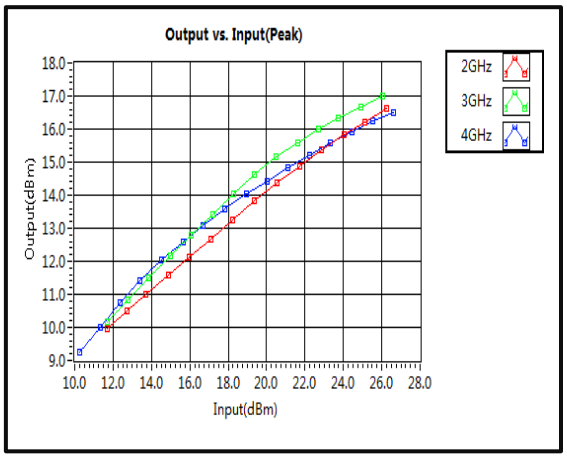
Output VSWR @+85℃



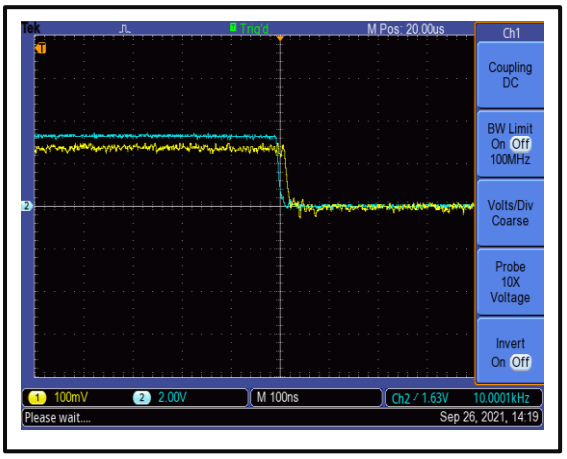
Flat Leakage Power



Peak Power Leakage

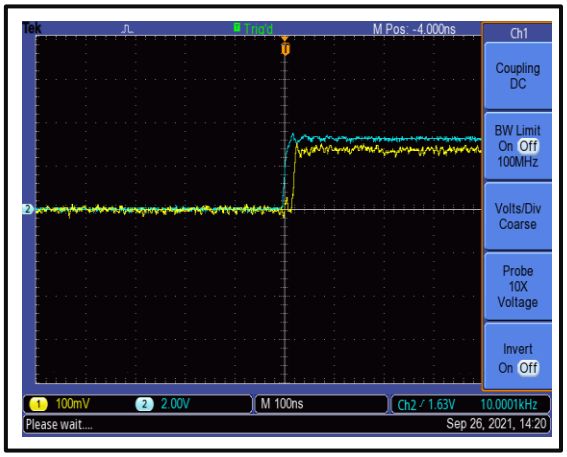


Recovery Time

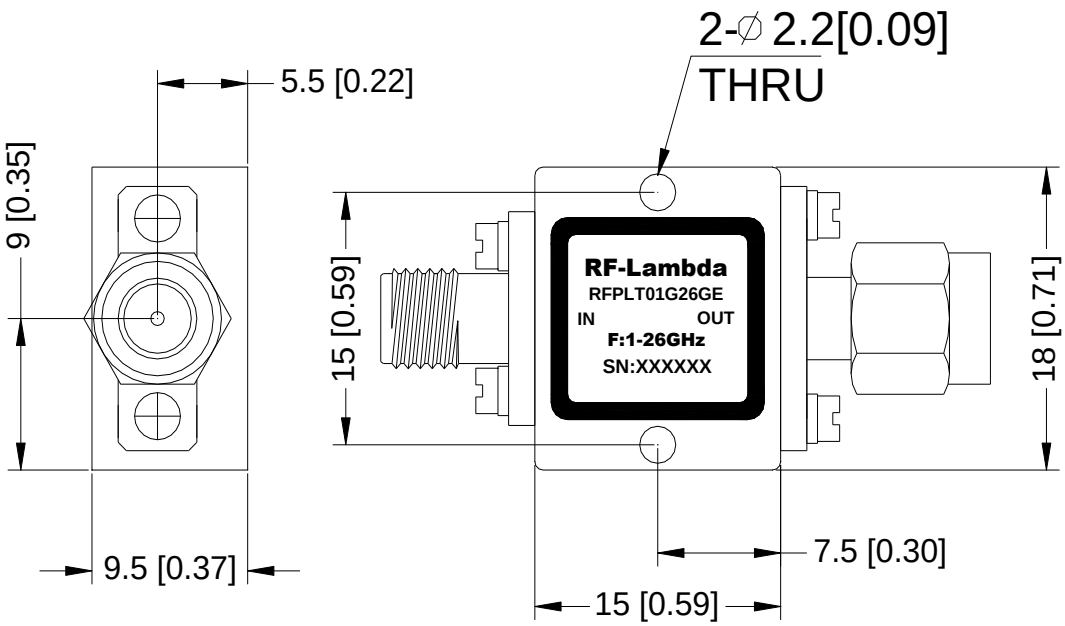


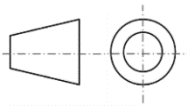
Typical Performance Plots

Limiting Speed



Outline Drawing





Notes:
1. Package Material: Aluminum
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Tolerances ±0.1 [0.004] unless otherwise specified.

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
RFPLT01G26GE	Input connector SMA-Female and Output connector SMA-Male	1GHz-26GHz Power Limiter

Important Notice

RF-LAMBDA USA LLC: www.rflambda.com
Sales: sales@rflambda.com Technical: support@rflambda.com