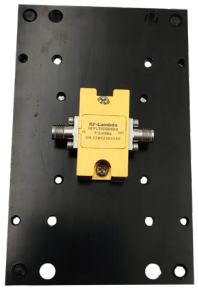
Wide Band 200W Power Limiter 2GHz-4GHz



Product Description

RFPLT02G04GG is a wide band power limiter with a frequency range of 2 to 4GHz.

The max input power of the limiter is 200W. The typical insertion loss is 0.9dB and Flat Leakage is 18dB.

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

Features

- Wide Band Operation 2-4GHz
- Passive, High Isolation Limiter
- Low Insertion Loss
- High Power Handle Capability up to 200W

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		2		4	GHz
Incident Power, Pulsed (500 us / 15%),50Ω, 25 °C			52.5	53	dBm
Incident Power, Pulsed (500 us / 15%),50Ω, 50°C				50.5	dBm
Insertion Loss			0.9	1.1	dB
VSWR			1.4	1.5	: 1
Flat Leakage			< 18		dBm
Peak Power Leakage at PIN > 30 dBm			< 18		dBm
Weight	Net		0.14 Max.		lbs.
	Including Heat Sink		0.7 Max.		
Input / Output Connectors			SMA-Female(Input)-SMA-Female(Output)		
Package			Epoxy Sealed (Standard)		
			Hermetically Sealed (Optional)		

Note: DC Blocks @ RF Output.

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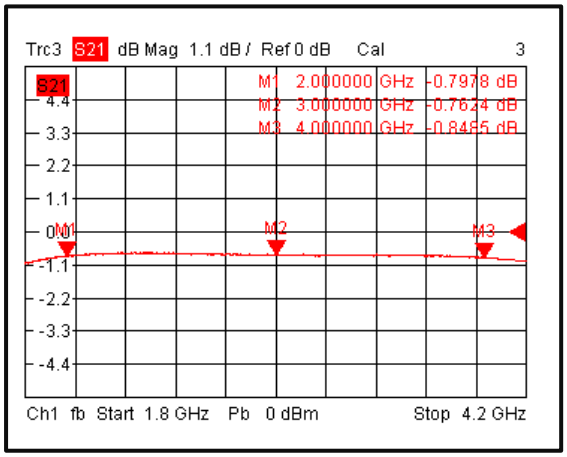
Environmental Specifications and Test Standards

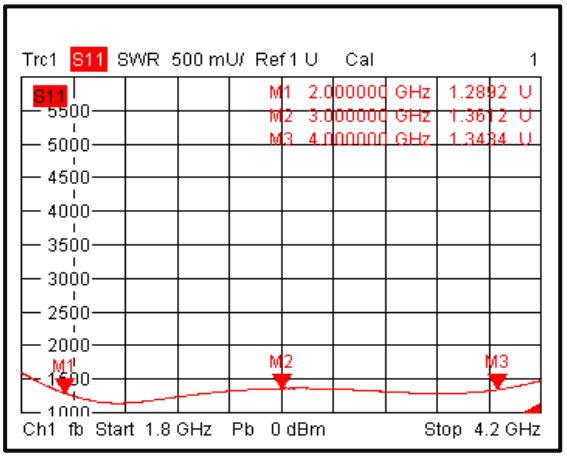
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-50ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85ºC for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

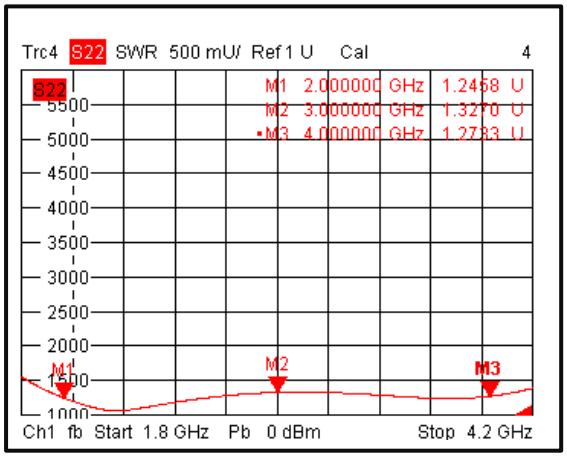
Insertion Loss @+25℃



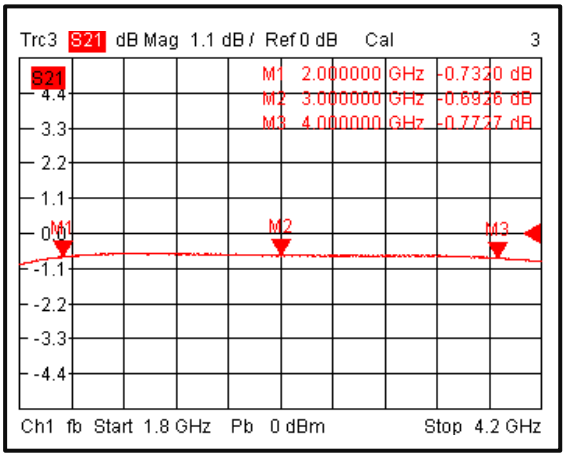
Input VSWR @+25℃



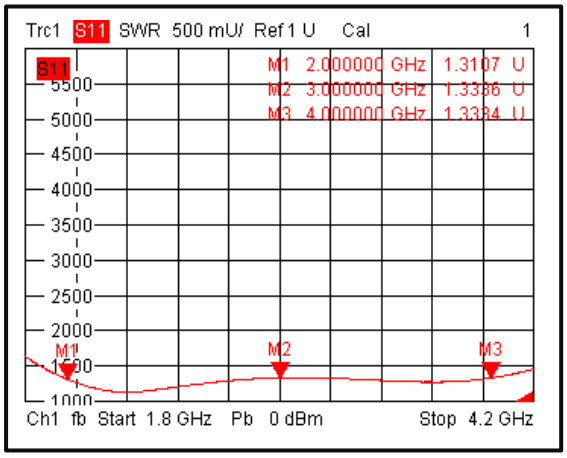
Output VSWR @+25℃



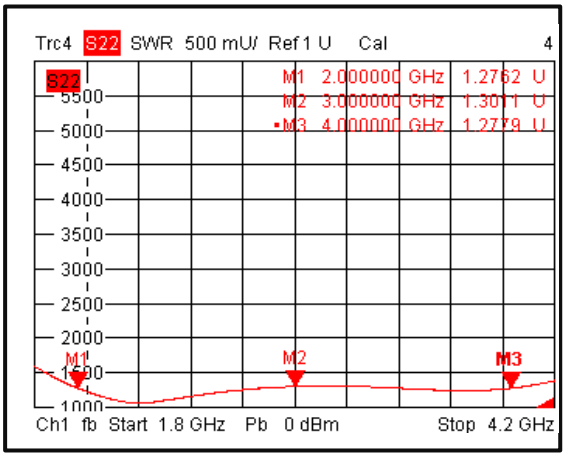
Insertion Loss @-40℃



Input VSWR @-40℃

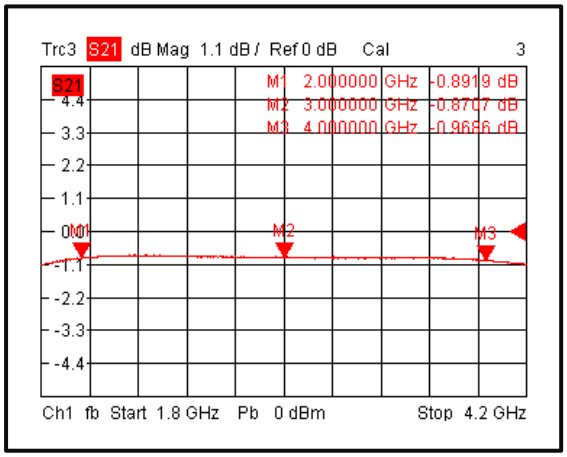


Output VSWR @-40℃

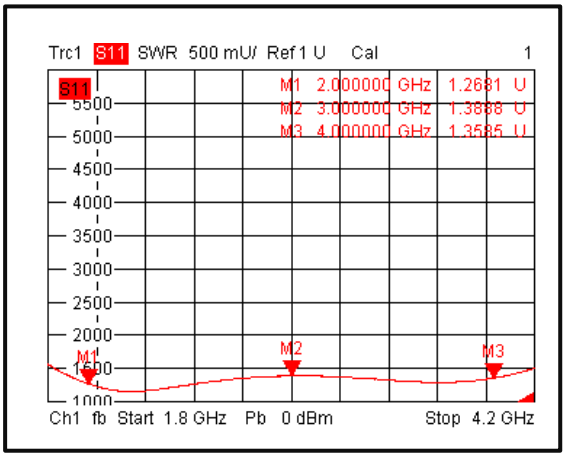


Typical Performance Plots

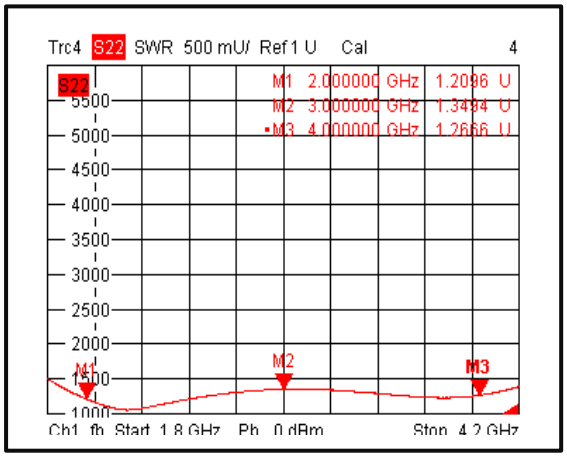
Insertion Loss @+85℃



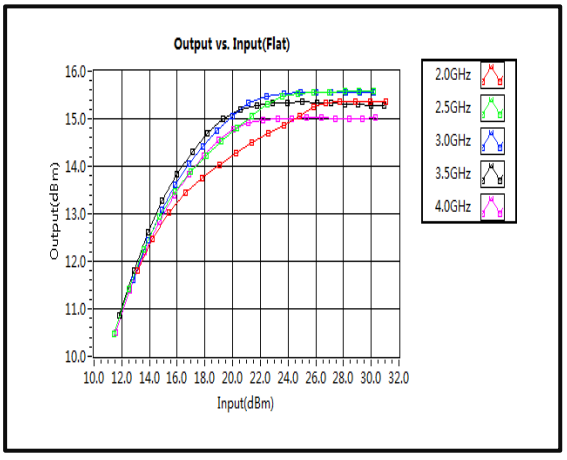
Input VSWR @+85℃



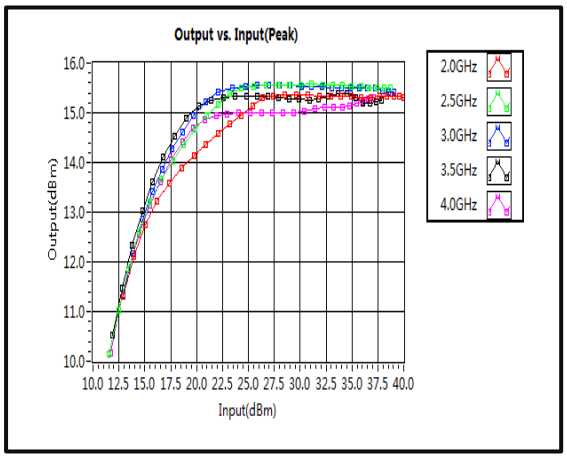
Output VSWR @+85℃



Flat Leakage Power

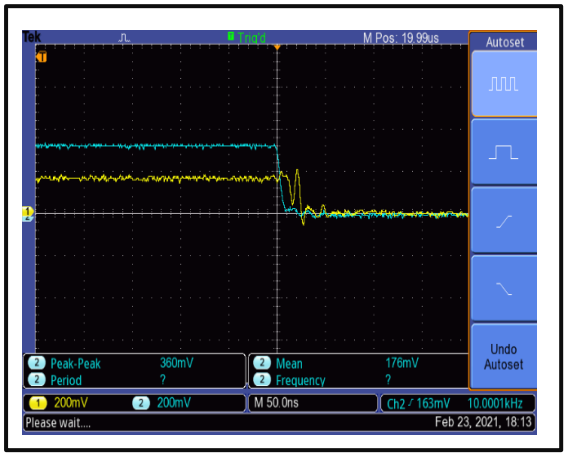


Peak Power Leakage

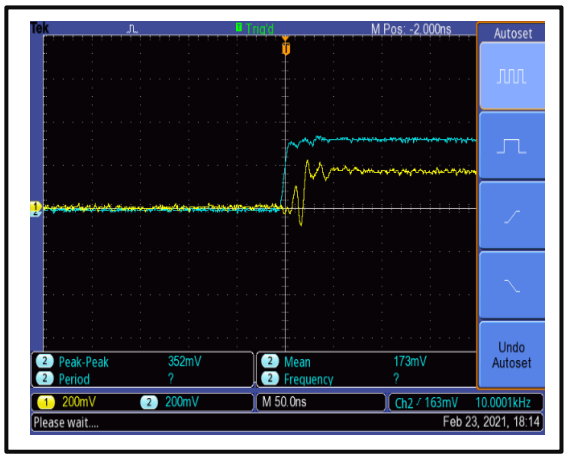


Typical Performance Plots

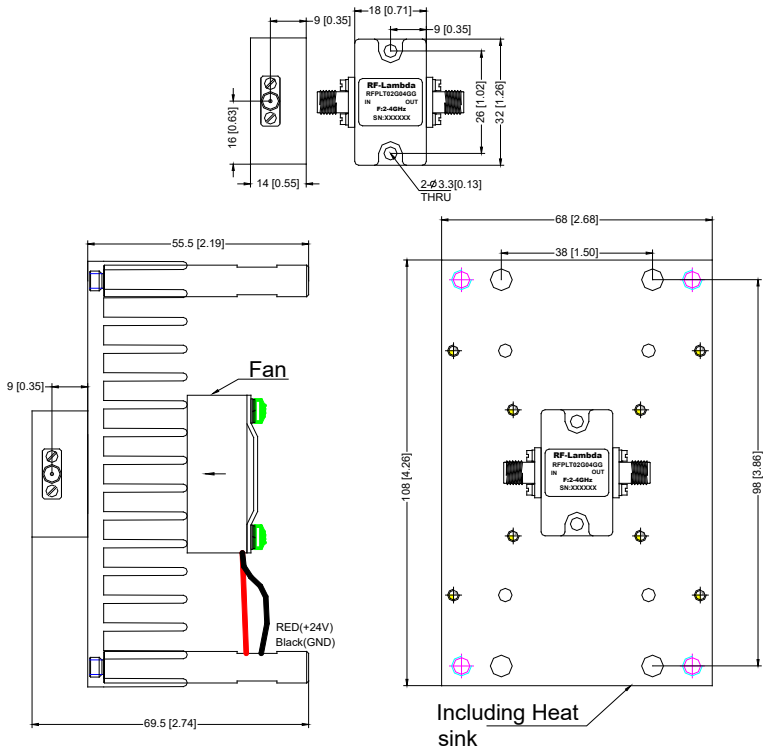
Limiting Speed



Recovery Time

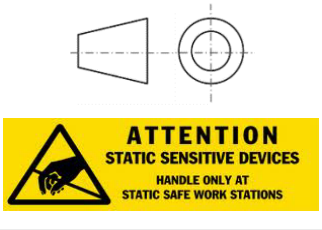


Outline Drawing



Notes:

1. Package Material: Copper
2. Plating: Gold
3. All dimensions are in millimeters [inches].
4. Housing Tolerances ±0.1 [0.004] unless otherwise specified(Excl Heat Sink).
5. Heatsink and Fan Included Mandatory for full power operation, (Required for 200W Power Handling).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
RFPLT02G04GG	Standard	2GHz-4GHz Power Limiter

Important Notice

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