Wide Band Power Limiter
0.1GHz-0.5GHz

Product Description

RFPLT02M04M is a wide band power limiter with a frequency range of 0.1 to 0.5GHz.

The max peak power of the limiter is 15W. The typical insertion loss is 0.3dB and flat leakage is 20dBm.

The power limiter's connectors are SMA-Female .

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

Features

- Wide Band Operation 0.1-0.5GHz
- Passive, High Isolation Limiter
- Low Insertion Loss and Good Return Loss
- High Power Handling Capability
- Customization available upon request

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		0.1-0.5		GHz
CW Input Power			5	W
Peak Power (30us with 5% duty cycle)			15	W
Insertion Loss		0.3	0.6	dB
VSWR		1.1	1.3	: 1
Flat Leakage		17	20	dBm
Peak Power Leakage		20	25	dBm
Weight		0.014 Max.		lbs.
Input / Output Connectors		SMA-Female		
Package		Epoxy Sealed (Standard)		
		Hermetically Sealed (Optional)		

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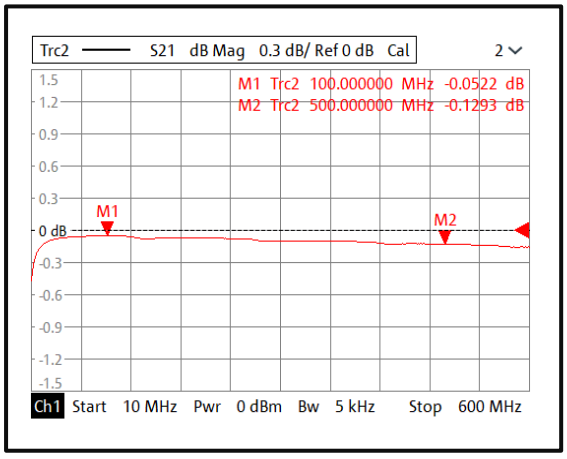
Environmental Specifications and Test Standards

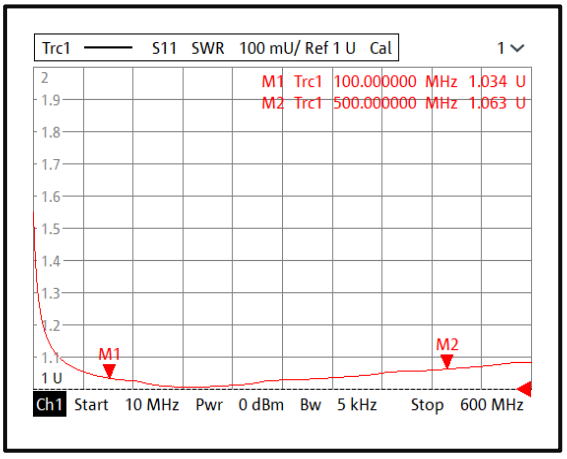
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-50ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85ºC for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

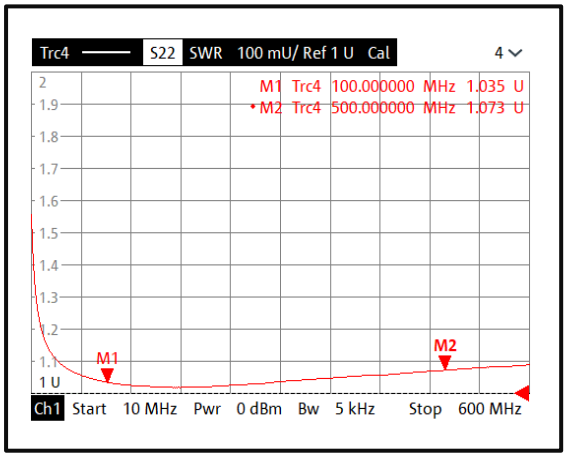
Insertion Loss @+25℃



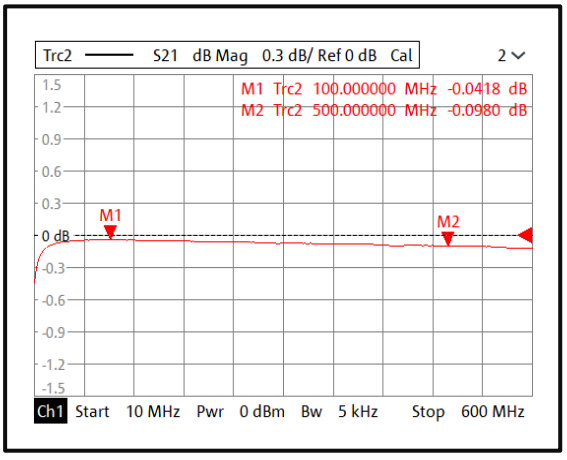
Input VSWR @+25℃



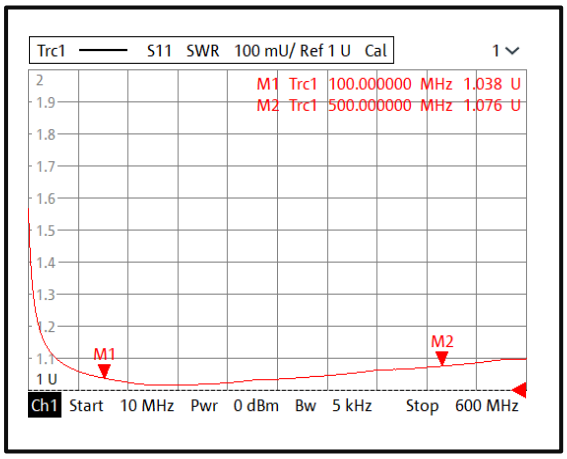
Output VSWR @+25℃



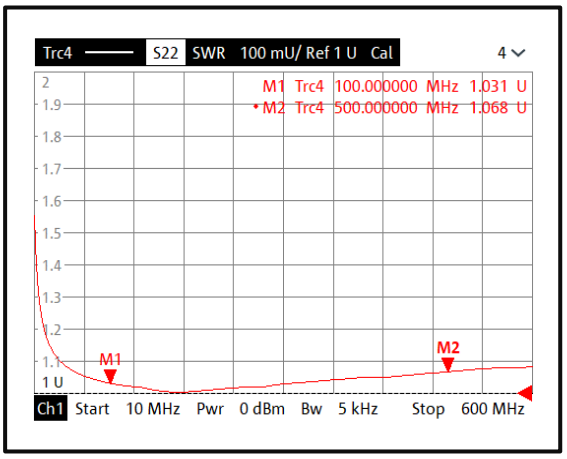
Insertion Loss @-40℃



Input VSWR @-40℃

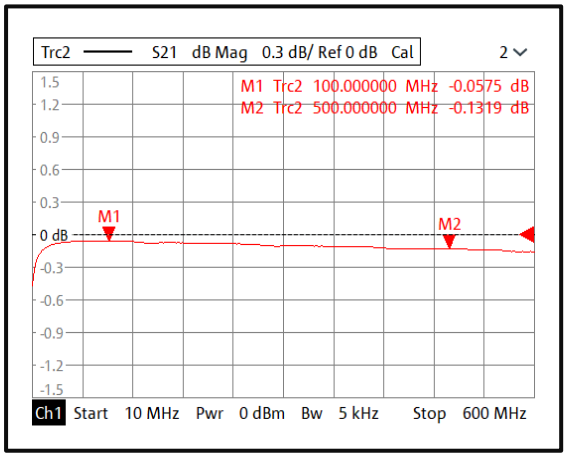


Output VSWR @-40℃

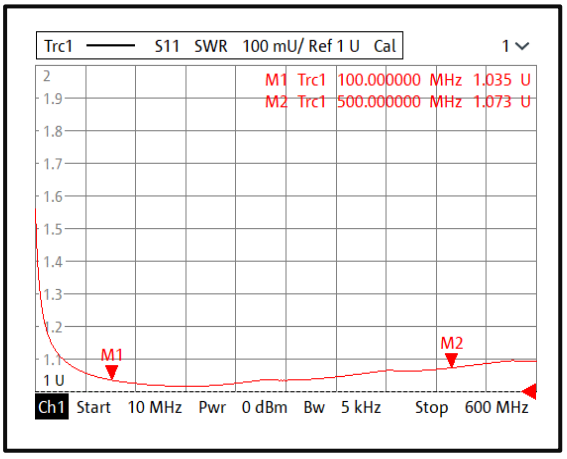


Typical Performance Plots

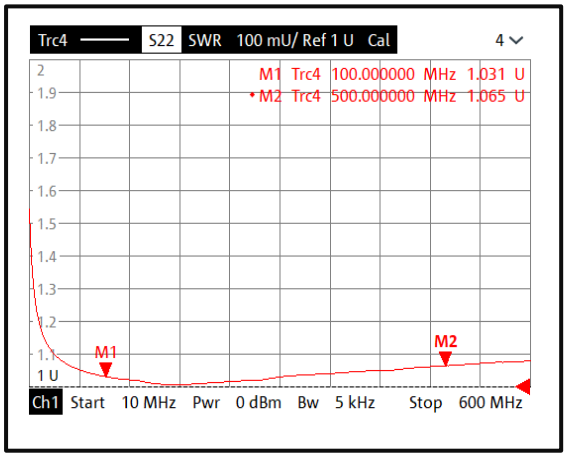
Insertion Loss @+85℃



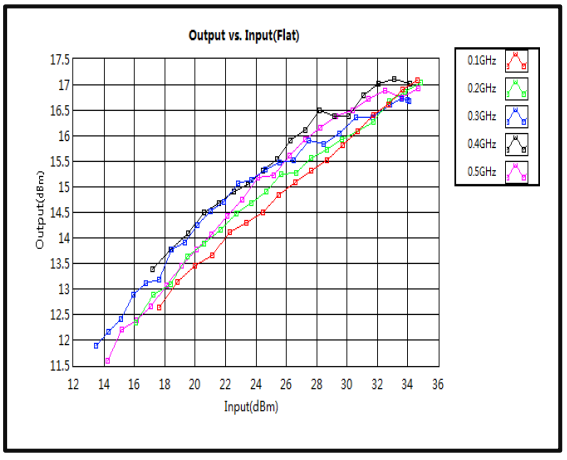
Input VSWR @+85℃



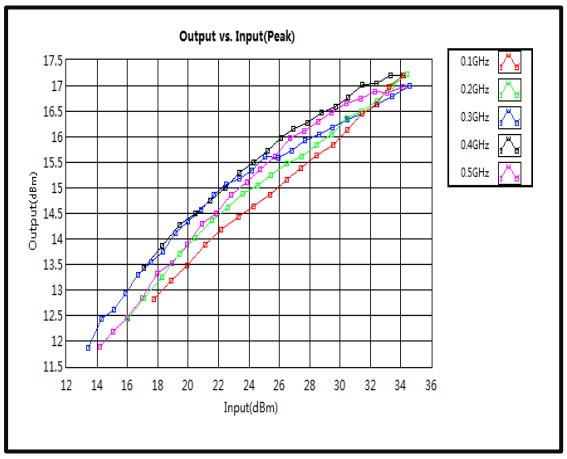
Output VSWR @+85℃



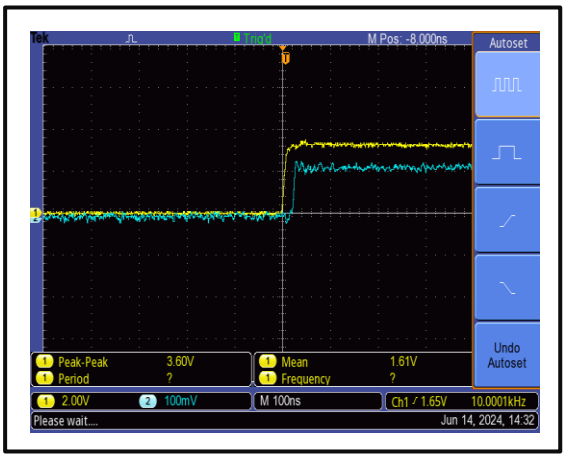
Flat Leakage Power



Peak Power Leakage



Speed



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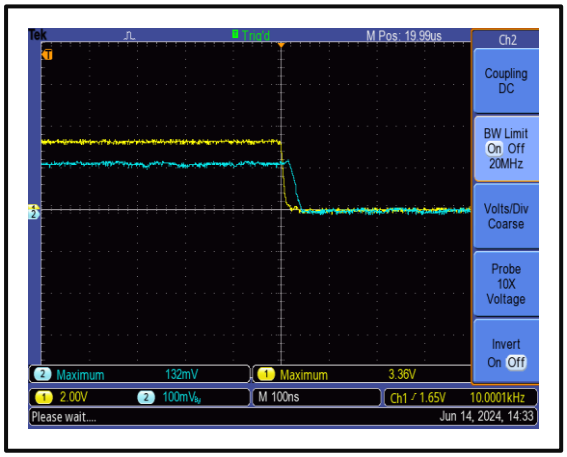
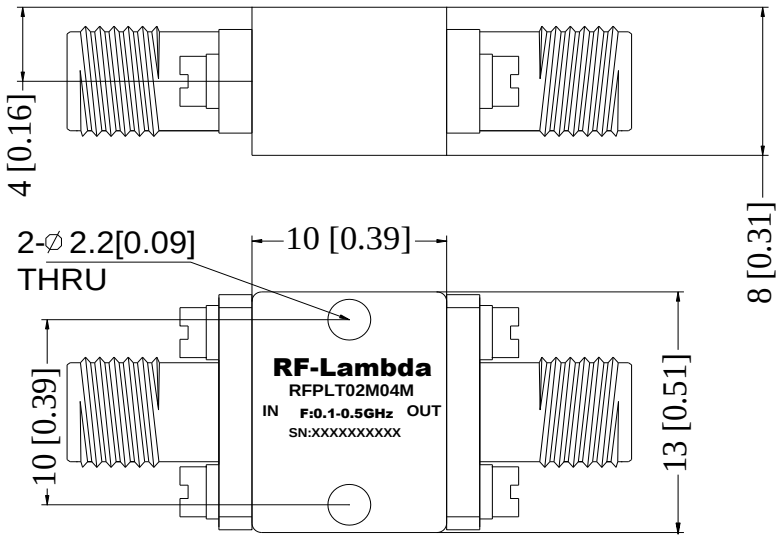
Typical Performance Plots

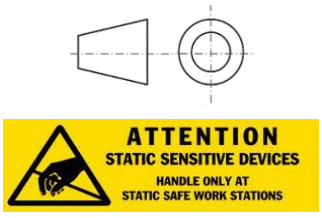
Speed



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
RFPLT02M04M	Standard	0.1GHz-0.5GHz Power Limiter

Important Notice

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