



RF-LAMBDA

LEADER OF RF BROADBAND SOLUTIONS

RFPLT08G12GG

Wide Band 50W Power Limiter 7.5 - 12.5GHz



Features

- Wide Band Operation 7.5-12.5GHz
- Passive, High Isolation Limiter
- Low Insertion Loss and Good Return Loss
- High Power Handling Capability up to 50W

Typical Applications

- Aerospace and military applications
- Test and Measurement
- Wireless Infrastructure

Electrical Specifications, $T_A=25\text{ }^{\circ}\text{C}$

Parameters	Min.	Typ.	Max.	Units
Frequency Range	7.5		12.5	GHz
CW Input Power (50 Ω , 25 $^{\circ}\text{C}$)			40	dBm
CW Input Power (50 Ω , 85 $^{\circ}\text{C}$)			36	dBm
Peak Power (pulsed, PW = 100us, Duty Cycle = 10%, 50 Ω , 25 $^{\circ}\text{C}$)			47	dBm
Peak Power (pulsed, PW = 100us, Duty Cycle = 10%, 50 Ω , 85 $^{\circ}\text{C}$)			46	dBm
Insertion Loss		0.75	1.0	dB
VSWR		1.3	1.5	: 1
Flat Leakage Power at PIN >30 dBm		18		dBm
Peak Power Leakage		20		dBm
Weight	1.06			ounces
Input / Output Connectors	SMA-Female			
Material	Aluminum			
Finish	Gold Plated			

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Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & 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	MIL-STD-883	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)



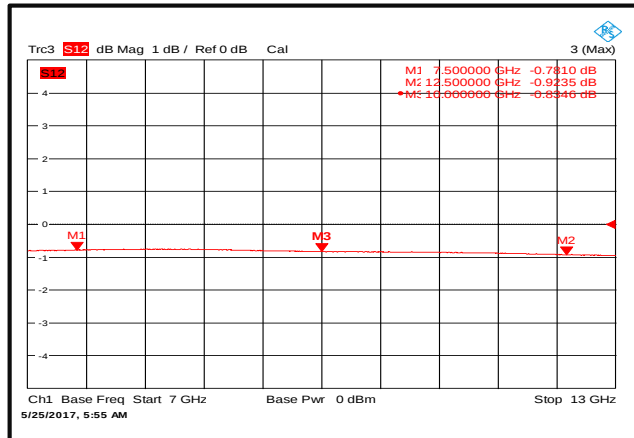
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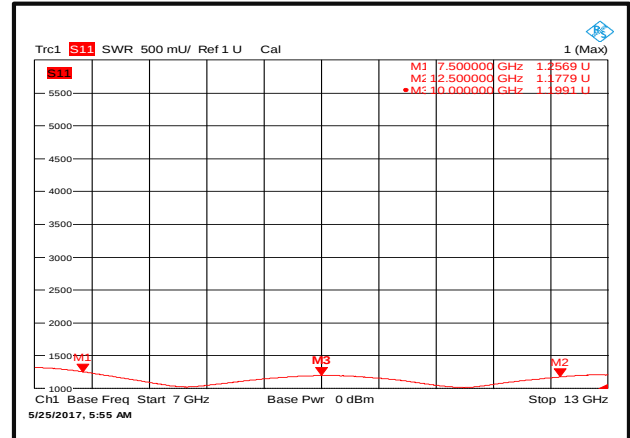
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Typical Performance Plots

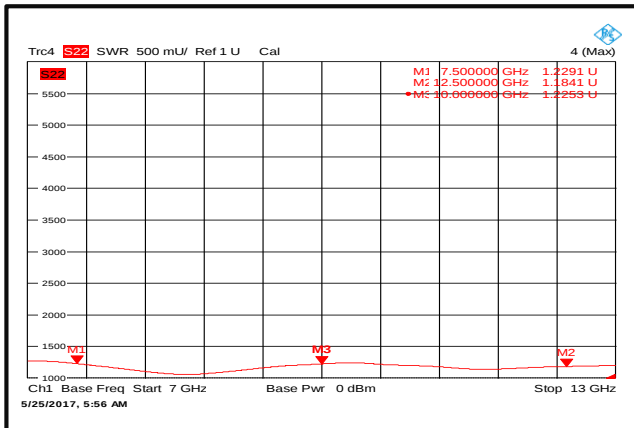
Insertion Loss @+25°C



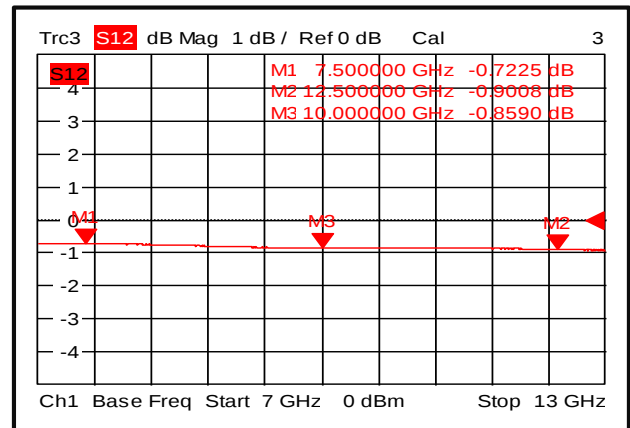
Input VSWR @+25°C



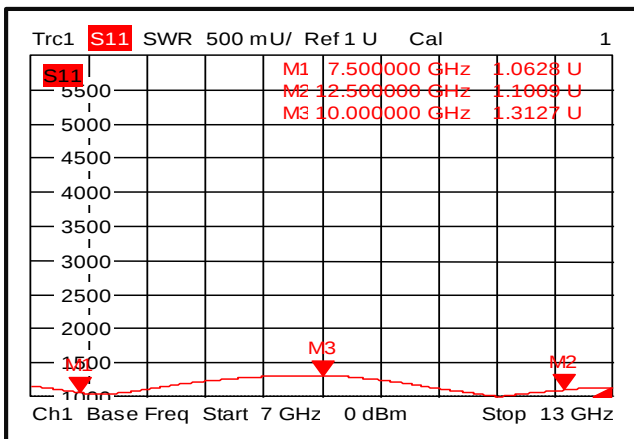
Output VSWR @+25°C



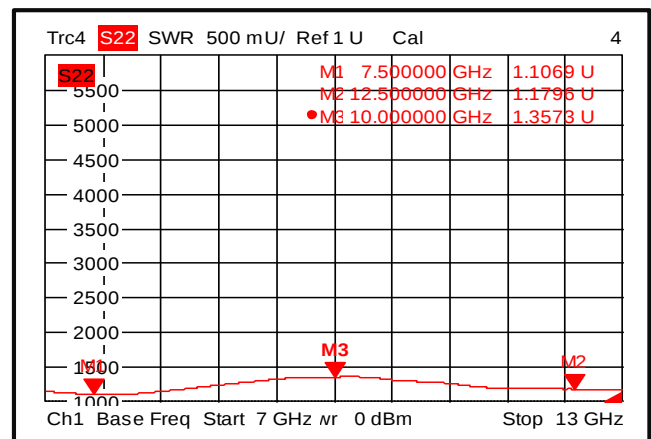
Insertion Loss @-45°C



Input VSWR @-45°C



Output VSWR @-45°C



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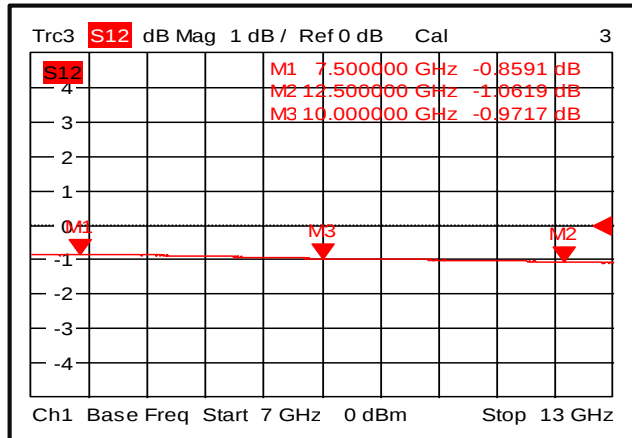


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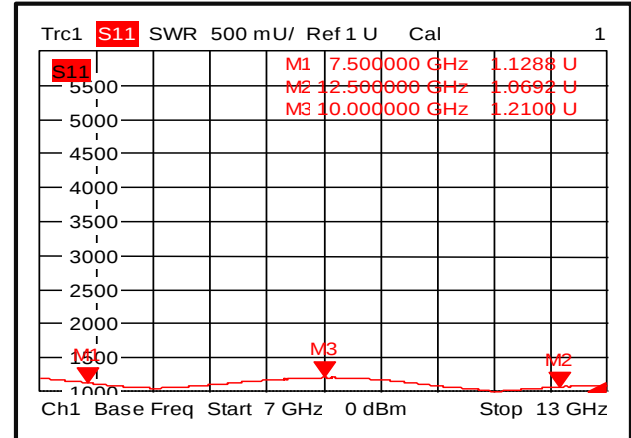
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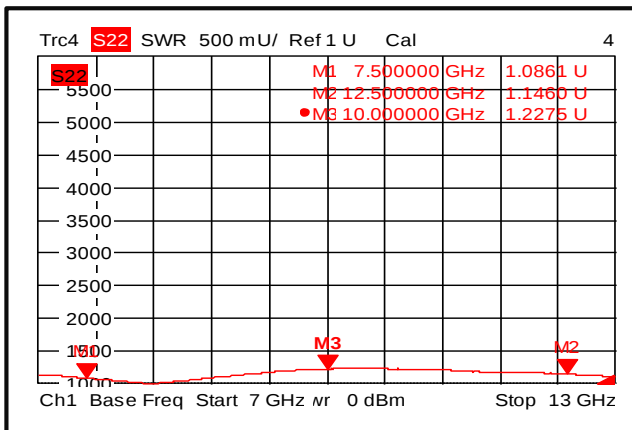
Insertion Loss @+85°C



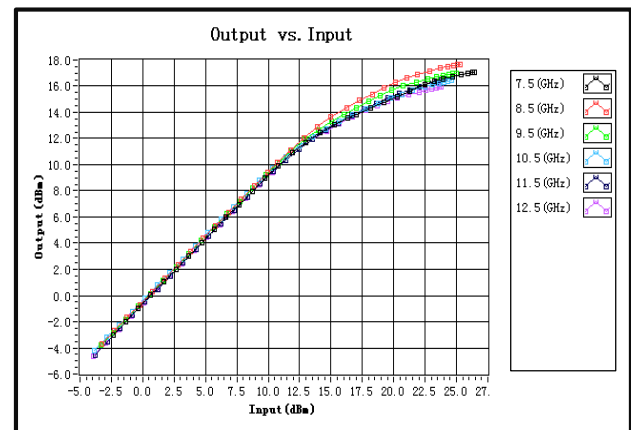
Input VSWR @+85°C



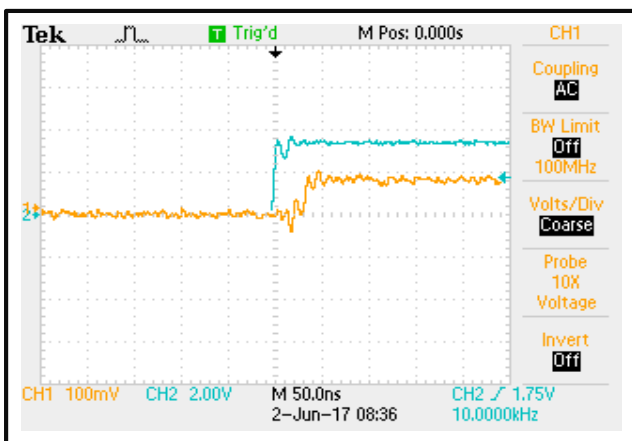
Output VSWR @+85°C



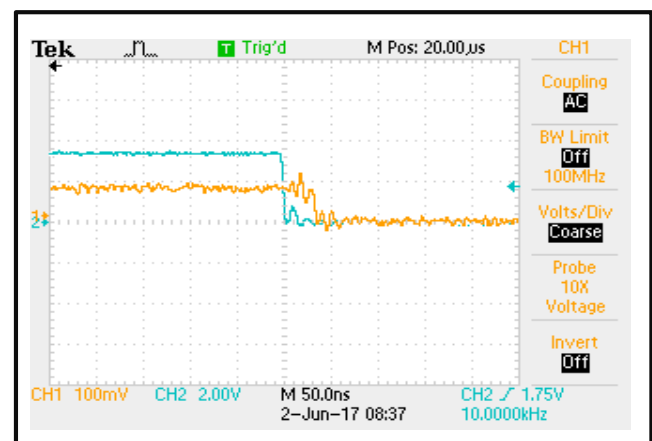
Flat Leakage Power



Limiting Speed



Recovery time



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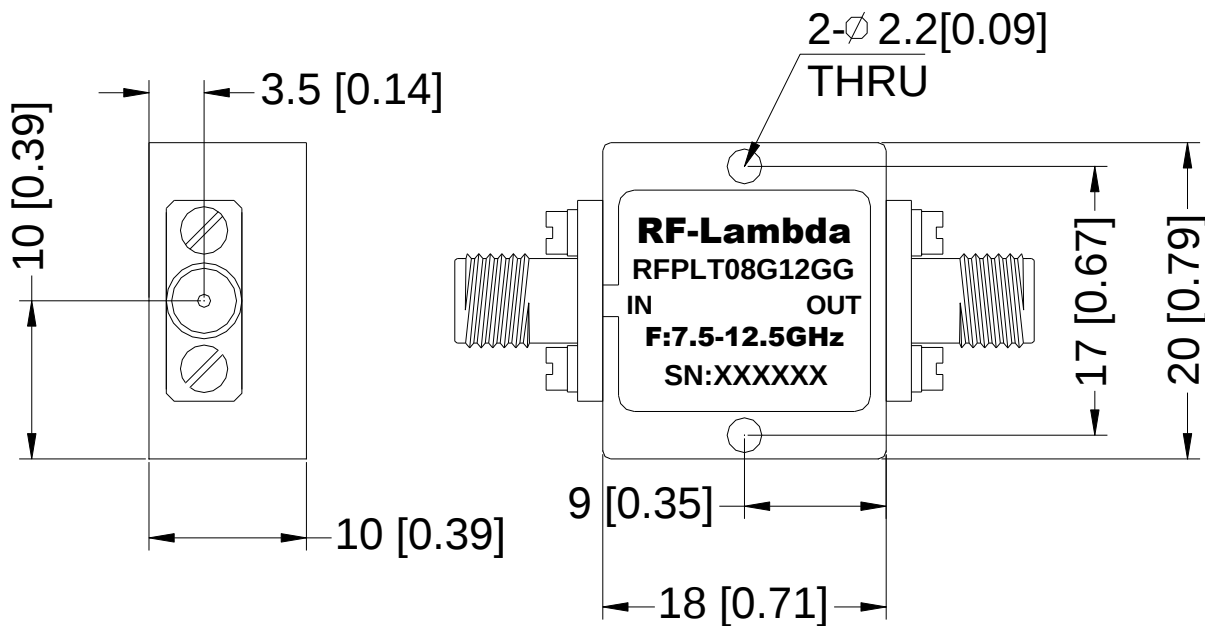
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Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.1 [0.004]



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