100W Hermetically Sealed Wide Band Power Limiter 0.05GHz-6GHz

Note: Photo is for illustration purposes only. Please refer to outline drawing.

Product Description

The RFPLT00M06G-H is a Hermetically Sealed wideband power limiter with a frequency range of 0.05 to 6GHz.

The max input power of the limiter is 100W. The typical insertion loss is 1.0 dB and Flat Leakage at > 30dBm input is 17dB.

The power limiter's input connector is N-female and output connector is N-male.

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

Features

- Hermetically Sealed Wide Band Power Limiter
- Passive, High Isolation Limiter
- Low Insertion Loss
- High Power Handling: 100W

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		0.05		1	1		6	GHz
Incident Power, CW, 50Ω , 50 °C				30			30	W
Incident Power, Pulsed PW = 10µs, DC = 10%, 50Ω, 50 °C				100			100	W
Insertion Loss			0.6	1.0		1.5	2.0	dB
VSWR			1.5			2		: 1
Flat Leakage at PIN > 30 dBm			17			16.5		dBm
Peak Power Leakage			18			18		dBm
Weight	Net			0.1Max.				lbs.
	Including Heat Sink			0.4Max.				
Input / Output Connectors				SMA-Female(Input) - SMA-Female(Output)				
Package				Hermetically Sealed (Laser Welded)				

Note: DC Blocks Included.

RF-LAMBDA USA LLC: www.rflambda.com
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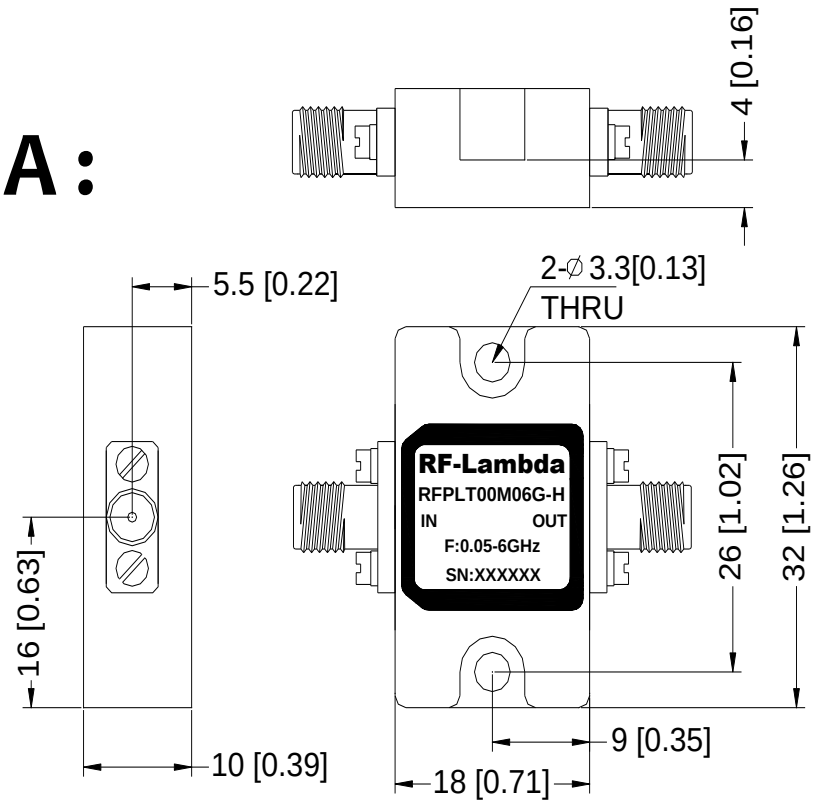
Environmental Specifications and Test Standards

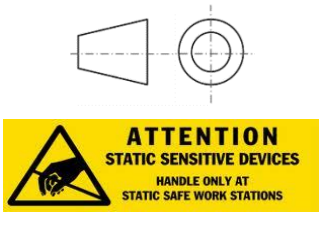
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-50ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85ºC for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

Outline Drawing

Type A :



Notes:
1. Package Material: Aluminum
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Tolerances ±0.15 [0.006] unless otherwise specified.
5. Heat sink required during operation (sold separately). Matching heatsink is listed on our website. If customer would like to use their own cooling method, please make sure the limiter will operate under the specs that listed in page 2 of this datasheet.
6. Heatsink and fan is included, see drawing this page. Power Handling is 30W for 30 minutes if heatsink is not used.
7. Standard torque wrench must be used to secure RF connectors.

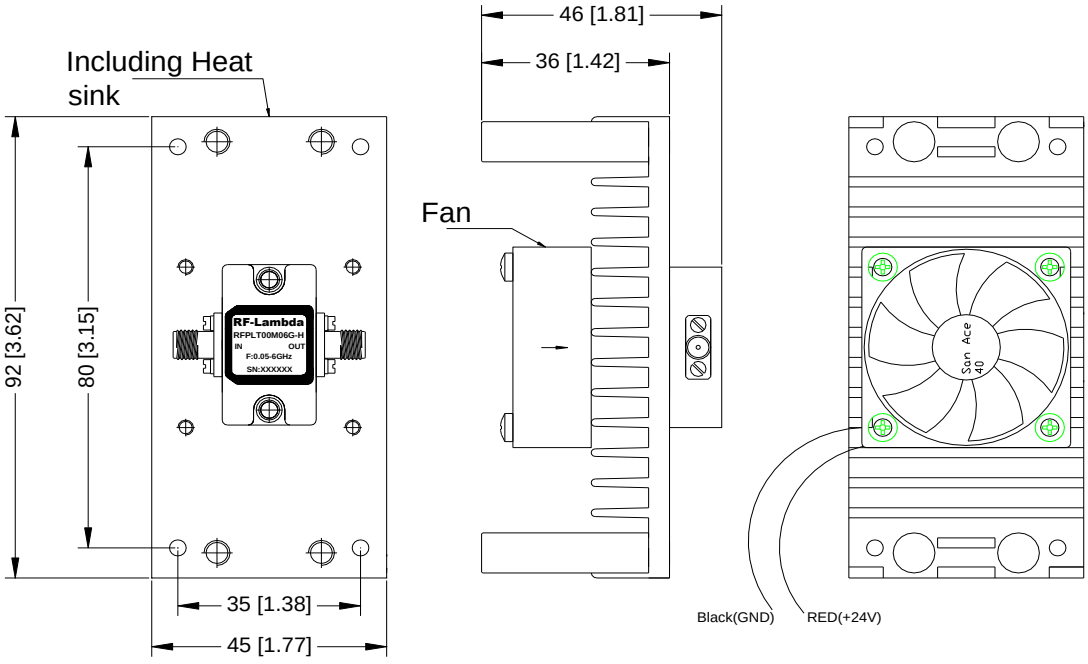


Additional Information

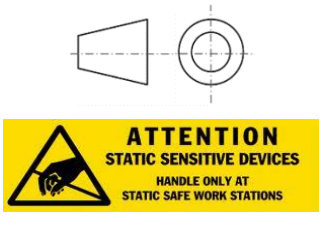
Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
Heatsink Lookup Specifications	https://rflambda.com/search_heatsink.jsp
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Outline Drawing

Type B :



Notes:
1. Package Material: Aluminum
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Tolerances ±0.15 [0.006] unless otherwise specified.
5. Heat sink required during operation (sold separately). Matching heatsink is listed on our website. If customer would like to use their own cooling method, please make sure the limiter will operate under the specs that listed in page 2 of this datasheet.
6. Heatsink and Fan Included - Mandatory for full power operation, (Required for 100W Power Handling)
7. Standard torque wrench must be used to secure RF connectors.



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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
RFPLT00M06G-H	Input connector and Output connector SMA- Female	0.05GHz-6GHz Hermetically Sealed Power Limiter

Important Notice

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