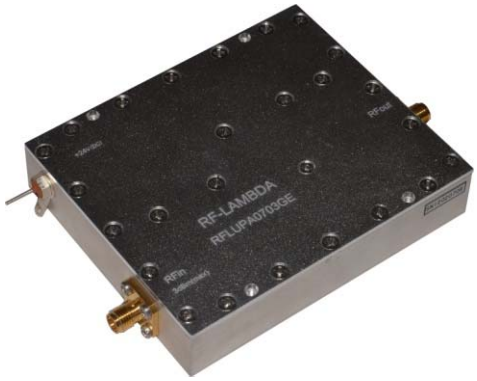
4W Wide Band Power Amplifier 3.0GHz~6.0GHz



- High output power >+35dBm.
- Applicable for base station, repeaters of cellular network
- Aerospace and military application
- LMDS multi-carrier operation
- High Peak to average handle capability
- High Linearity and low noise figure
- All specifications can be modified upon request

Electrical Specifications			
Frequency Range:	3.0-6.0GHz	P1dB	+35dBm Min
Noise Figure:	5.0dB	Out IP3:	+44dBm
Gain:	36dB	Output VSWR:	2.0 : 1
Flatness:	+/-2.0 dB	Input VSWR:	2.0 : 1
Input Power	+1dBm (opt.) +5dBm (max.)	DC Voltage:	+24VDC 1.0A max
Mechanical and Environmental Specifications			
Operation Temperature:	-40°C to 85°C base plate	Mechanical shock	30G, 11mSec half sin wave, 3 axis both directions
Vibration:	14.2g RMS (15-2000Hz) functional	Humidity	95% relative humidity, 65°C 96Hour
	16.2g RMS (15-2000Hz) endurance, 1 hour per axis	MTBF	50000 hour min
Connectors:	SMA-Female	Case:	Conductive no paint
	Supply RFI filter solder Pin	Dimension Size (L x W x H):	See drawing. (Heat Sink is a option)

Heat Sink required during operation.

Frequency (GHz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	P1dB	Idd (mA)
Temperature 25°C						
3.00	-14.70	38.20	-48	-22.3	35.70	650.00
3.75	-8.90	38.50	-49	-21.5	35.80	
4.50	-14.70	35.60	-50	-13.1	35.60	
5.25	-12.80	33.80	-53	-14.1	35.40	
6.00	-13.10	34.80	-55	-17.5	35.30	

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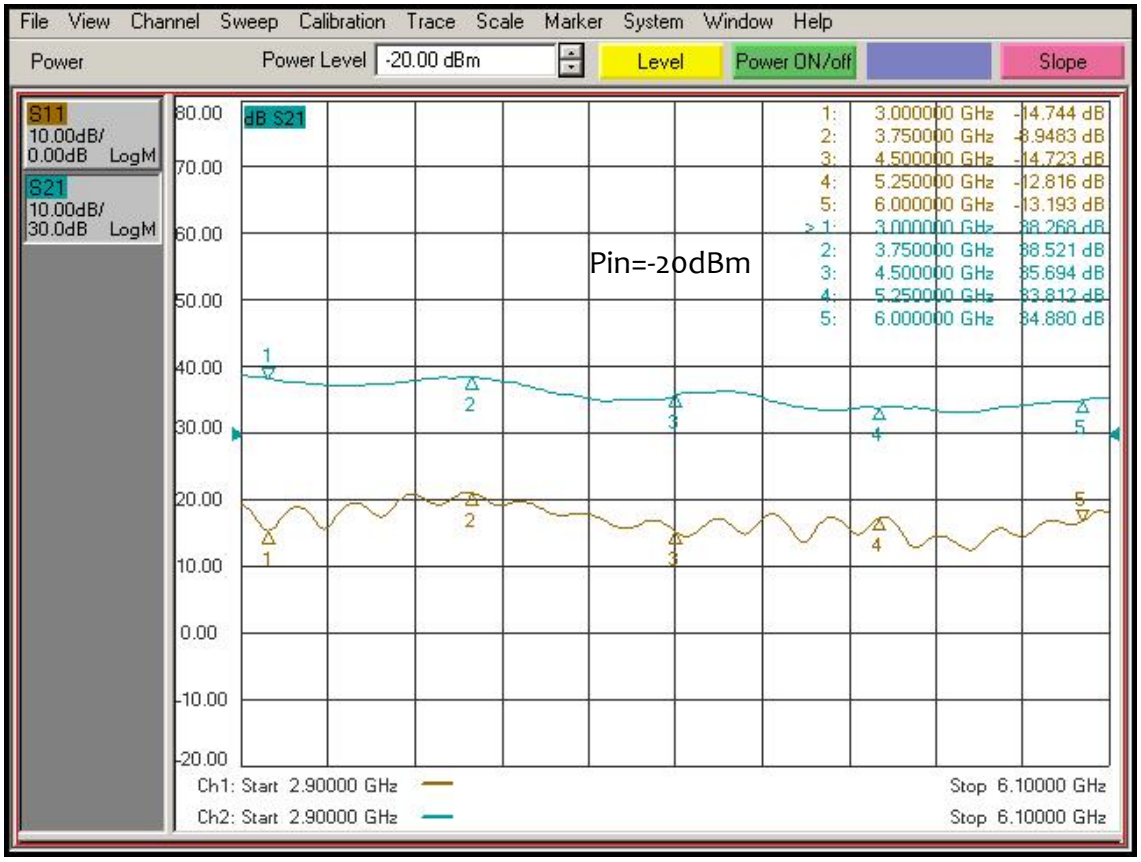

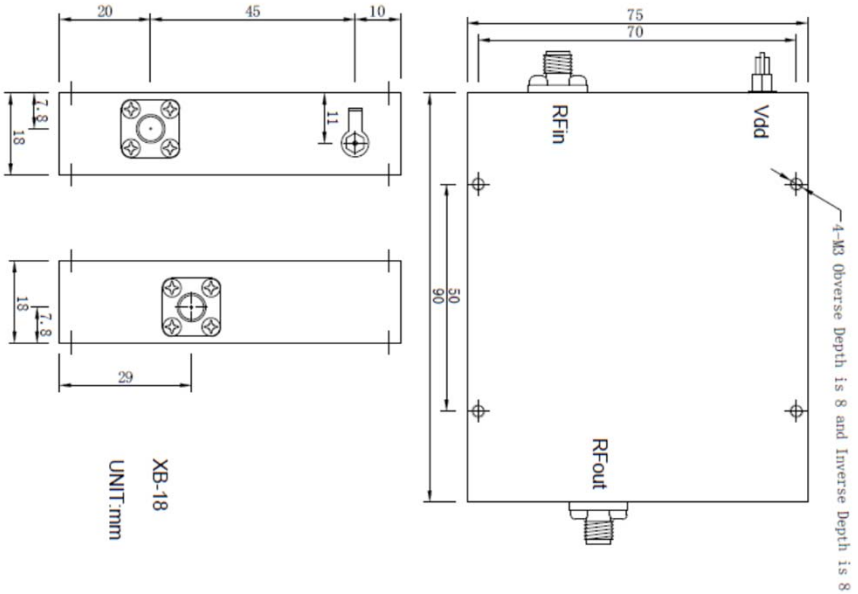

Amplifier Use

Ensure that the amplifier input and output ports are safely terminated into a proper 50 ohm load before turning on the power. Never operate the amplifier without a load. A proper 50 ohm load is defined as a load with impedance less than 1.9:1 or return loss larger than 10dB relative to 50 Ohm within the specified operating band width.

Power Supply Requirements

Power supply must be able to provide adequate current for the amplifier. Power supply should be able to provide 1.5 times the typical current or 1.2 times the maximum current (whichever is greater).

In most cases, RF-Lambda amplifiers will withstand severe mismatches without damage. However, operation with poor loads is discouraged. If prolonged operation with poor or unknown loads is expected, an external device such as an isolator or circulator should be used to protect the amplifier.

Ensure that the power is off when connecting or disconnecting the input or output of the amp.

Prevent overdriving the amplifier. Do not exceed the recommended input power level.

Adequate heat-sinking required for RF amplifier modules. Please inquire.

Amplifiers do not contain Thermal protection, Reverse DC polarity or Over voltage protection with the exception of a few models. Please inquire.

Proper electrostatic discharge (ESD) precautions are recommended to avoid performance degradation or loss of functionality.

What is not covered with warranty?

Each of RF-Lambda amplifiers will go through power and temperature stress testing. Due to fragile of the die, IC or MMIC, those are not covered by warranty. Any damage to those will NOT be free to repair.