AC 110V/220V Powered
Low Noise Amplifier 50-69GHz NF: 3.8dB

- Short Haul / High Capacity Links
- Wireless LANs
- Military & Space
- Noise Figure: 4 dB
- P1dB: +16 dBm
- Gain: 40 dB
- Supply Voltage: +5V AND -5V
- 50 Ohm Matched Input/Output

RoHS Compliant

Electrical Specifications [1], TA = +25° C
Vd = +5V, Vg = -5V, Id = 227mA

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	50		60	61		69	GHz
Gain	37	40	41	31	36	38	dB
Gain Flatness		±0.5			±0.5		dB
Gain Variation Over Temperature(-45 ~ +85)		±0.5			±0.5		dB
Noise Figure		4			4		dB
Input Return Loss		10			10		dB
Output Return Loss		7			7		dB
Output Power for 1 dB Compression (P1dB)		16			16		dBm
Output Third Order Intercept (IP3)		25			25		dBm
Supply Current (Idd) (Vd=+5V)		220	227		227	227	mA
Isolation S12	60	60	60	66	67	70	dB
Input Max Power(no damage)			-10			-10	dBm
Weight	20						g
Impedance	50						Ohms
Input /Output Connector	1.85mm-Female						
Finishing	Standard: Gold 40 micron; Nickel 220 micron thickness						
	Option: Gold 80 micron; Nickel 180 micron thickness						
Material	Aluminum/copper						
Package Sealing	Epoxy Sealing (Standard)						
	Hermetically Seal (Option with extra charge)						

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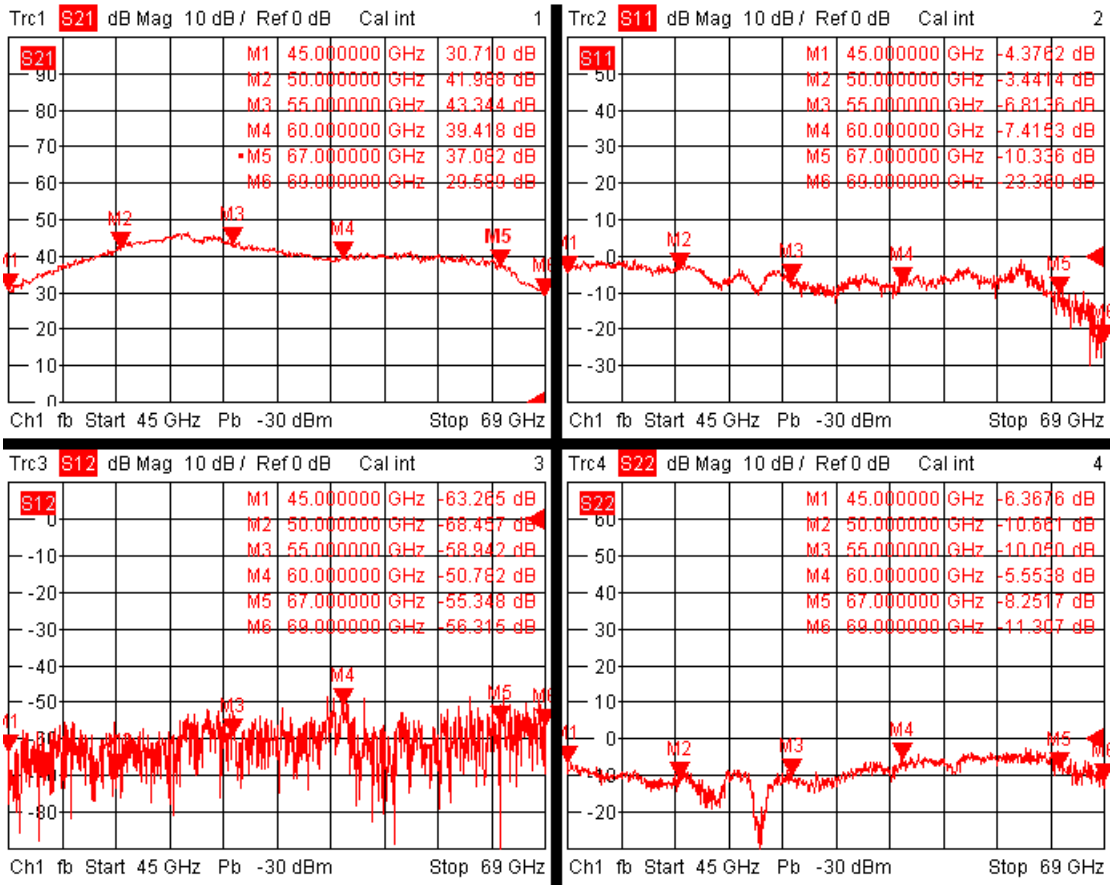
Absolute Maximum Ratings

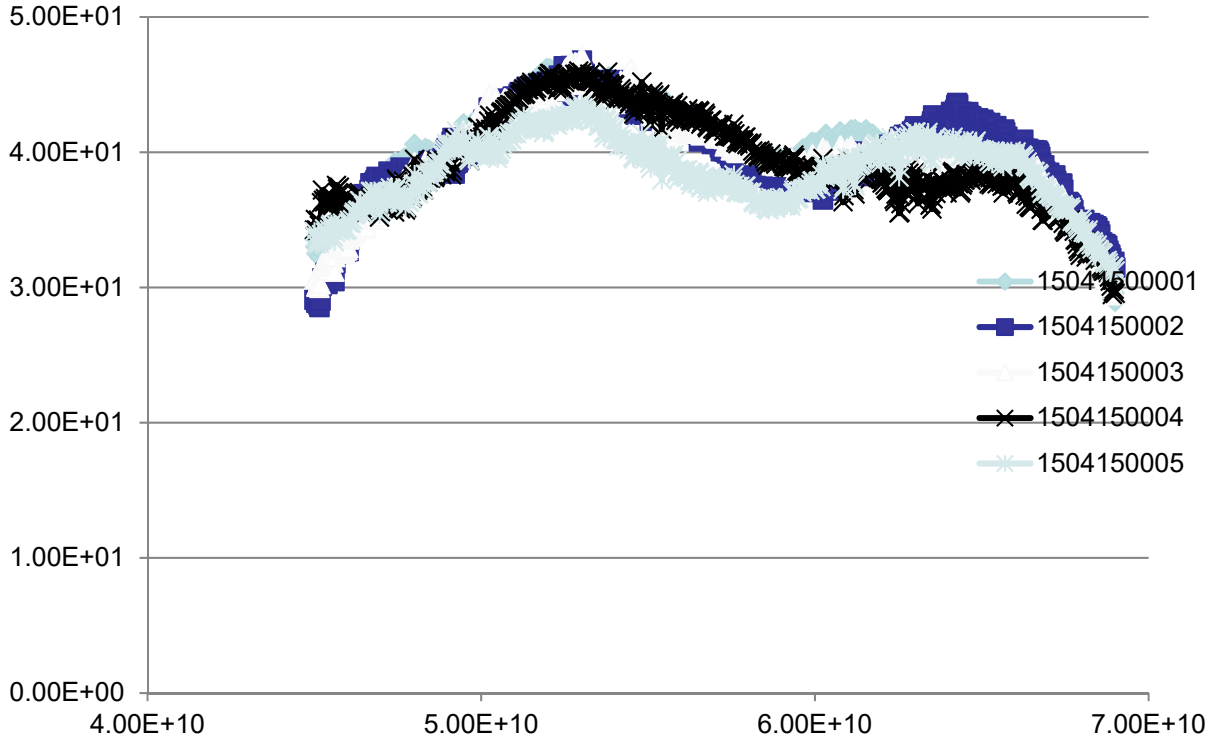
Drain Biasing	+5~+5.2Vdc
Gate Biasing	-5V to -5.2Vdc
RF Input Power (RFIN)	-10dB m
Storage Temperature(C°)	-65 to +150

Environment specifications

Operational Temperature (C°)	-45 ~ +85(Case Temperature must be less than 85C all time)
Storage Temperature (C°)	-65 ~ +150
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°c
Shock	20G for 11msc half sin wave,3 axis both directions

Biasing Up Procedure	
Step 1	Connect input and output
Step 2	Connect Ground Pin
Step 3	Connect -5V biasing
Step 4	Connect +5V biasing
Power OFF Procedure	
Step 1	Turn off -5V biasing
Step 2	Turn off +5V biasing
Step 3	Remove RF connection
Step 4	Remove Ground.





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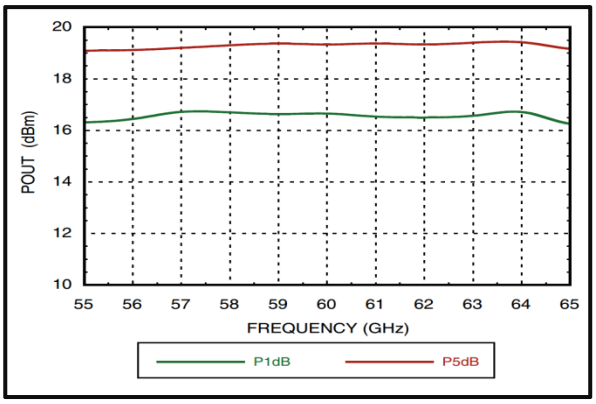
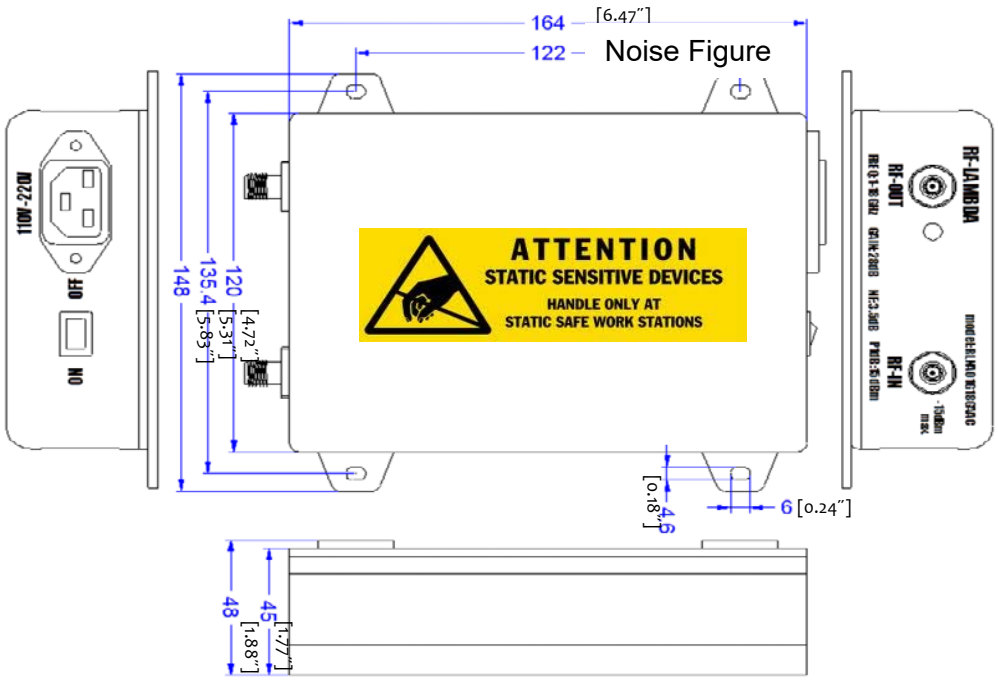
P1dB vs. Frequency





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