

Linear RF Amplifier

- **Linear Power: 30 dBm**
- **Frequency Response: 0.8 – 3.0 GHz**
- **Saturated Power: 32 dBm**
- **Gain: 38 dB**



Description:

Designed for linear application in the 0.7 to 3.0 GHz range. This amplifier utilizes GaAs FET devices that provide high gain, wide dynamic range.

Suggested applications: Video, CW, multi-carrier, pulse, PM, AM & FM modulation.

Updated: 0909

ELECTRICAL SPECIFICATION @ VDD= +12.5VDC: Temp.=25°C, 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	0.8		3.0	GHz
Power Output Saturated	P _{sat}		32		dBm
Power Output P-1dB	P _{-1dB}		30		dBm
Gain	G	36	38		dB
Small Signal Gain Flatness	ΔG		±2		dB
Input VSWR	S11			2.0:1	-
Harmonics @ 30dBm 2 nd /3 rd	H		-30/-50		dBc
Inter-modulation Point Measured @ 2GHz,100KHz spacing,20dBm avg.	IP ₃		+47		dBm
Spurious Signals	dBc			-60	dBc
Operating Voltage	Vdc	11	12.5	14	Volt
Operating Current @ 1watt	Amps		525	600	mamp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Typical 30us OFF, 60us ON.			us

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	2.5 x 4.7 x 0.57	Max	Inch
RF Connectors IN/OUT	SMA in, SMA out	-	-
DC Connectors	Filtered feed-through	-	-
Cooling	Heat-sink not included	-	-
Weight	0.5	Max	lb

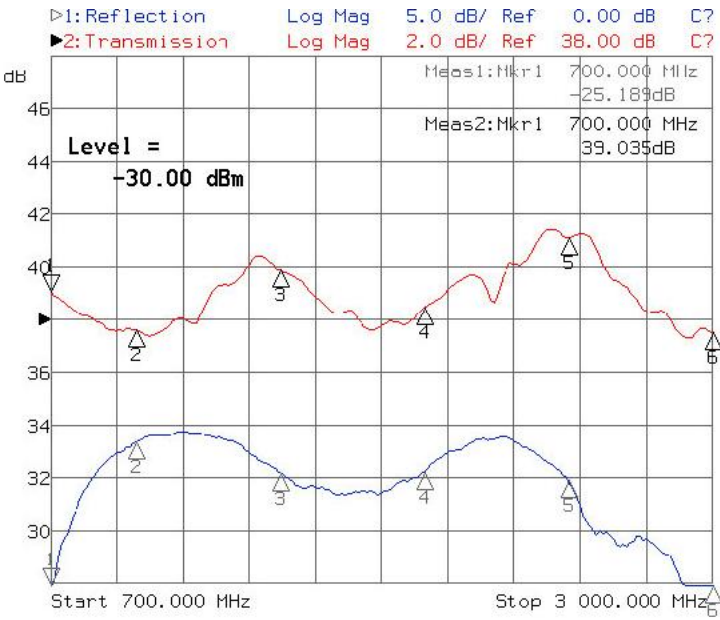
PROTECTIONS

Thermal Shutdown	None	Typ
Input Overdrive	None	Max
Load VSWR	6.0:1 up to 30dBm	Max
Reverse Polarity Protection	None	-

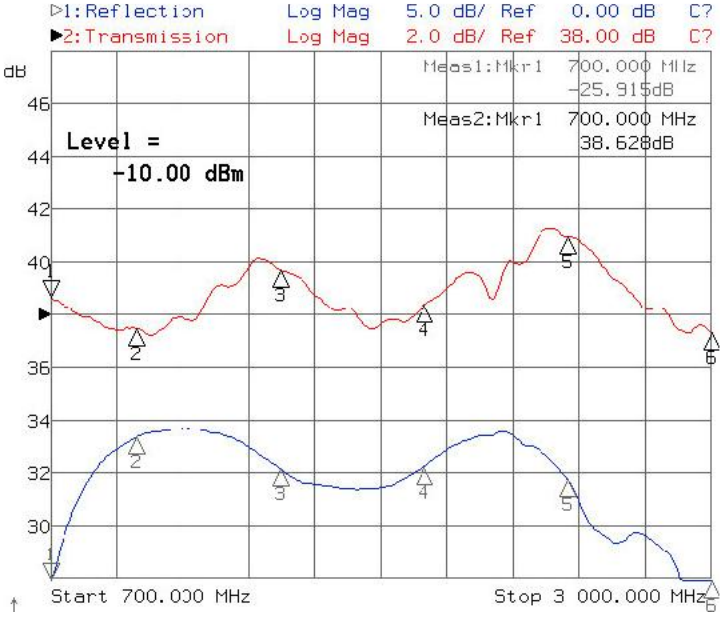
ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Units
Operating Case Temperature	T _c	0°C		+50°C	°C
Storage Temperature	T _{stg}	-30°C		+100°C	°C
Relative humidity non-condensation	RH	95			%

Response Curves:

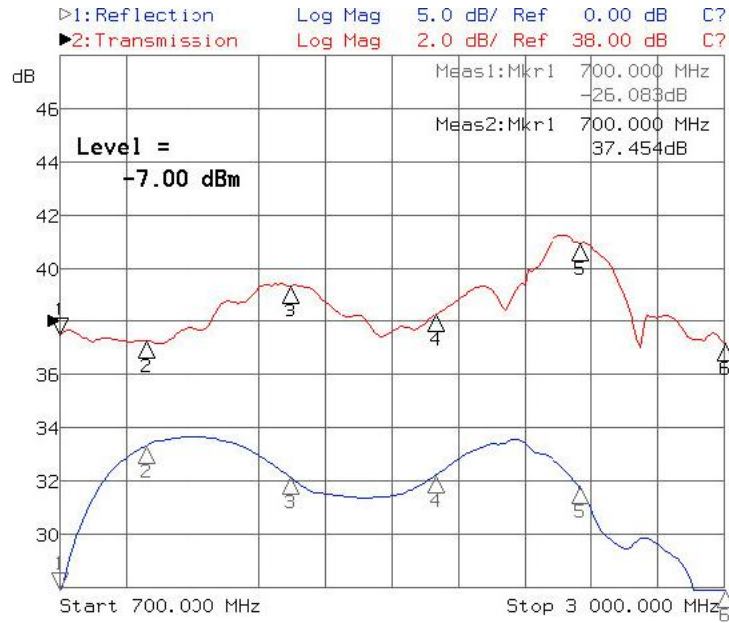


Small Signal Frequency Response Curve

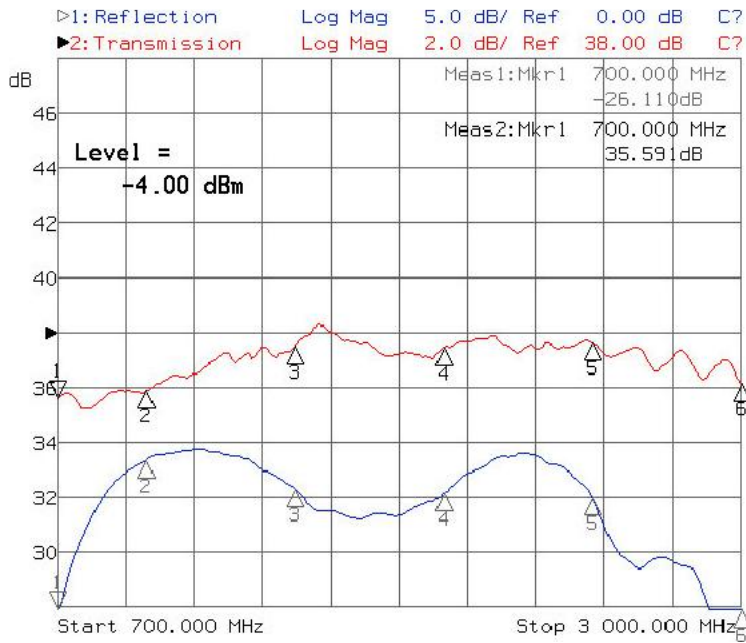


Frequency Response Curve @ 27dBm

Response Curves:

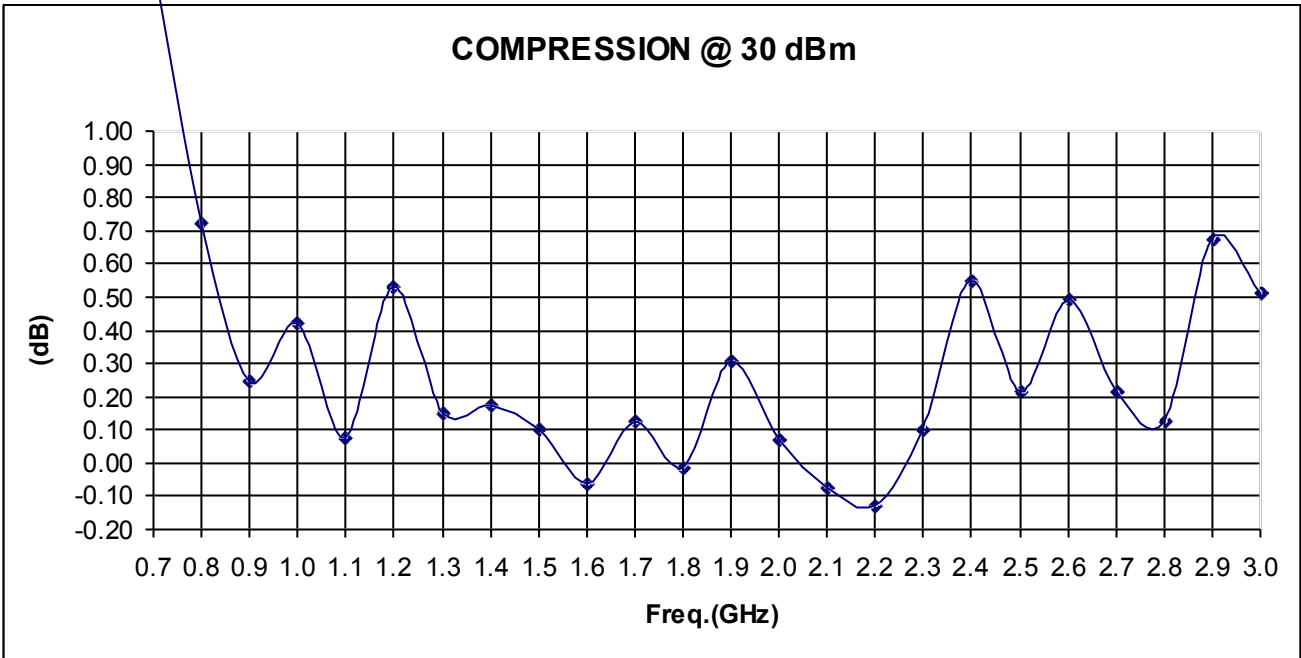
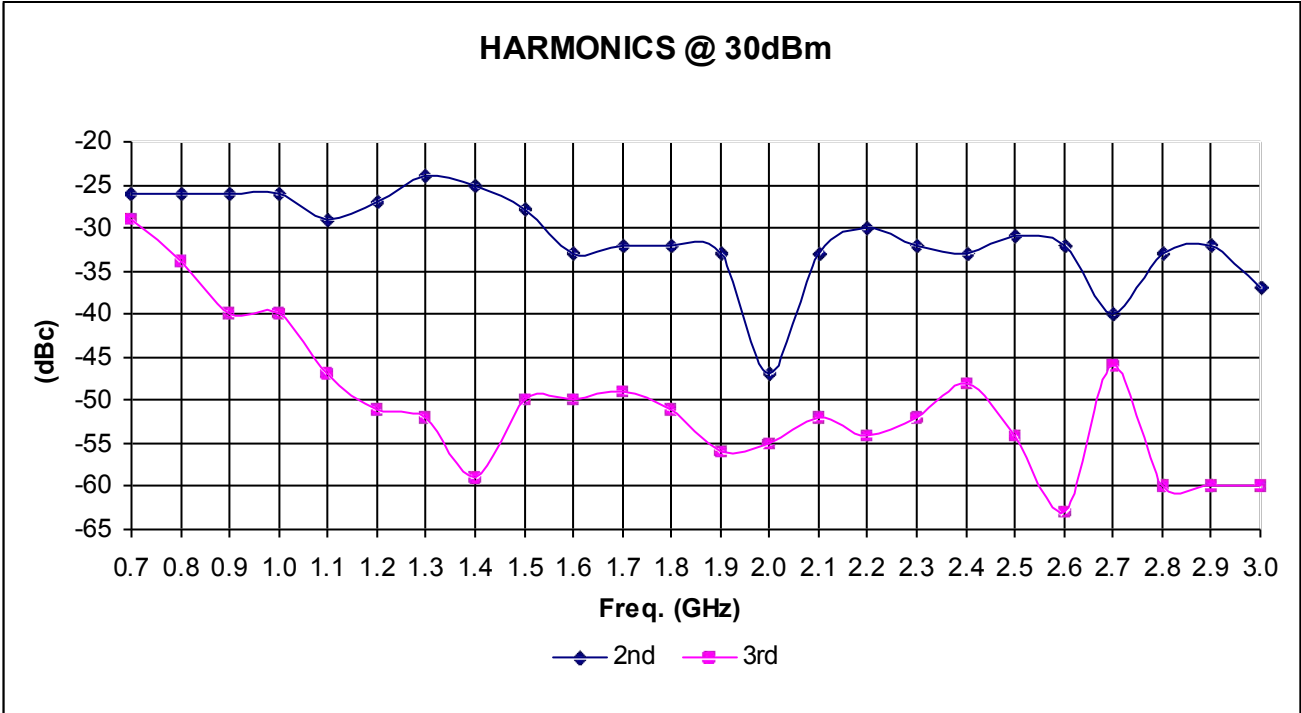


Frequency Response Curve @ 30dBm



Frequency Response Curve @ 32dBm

Response Curves:



Outline Drawing:

