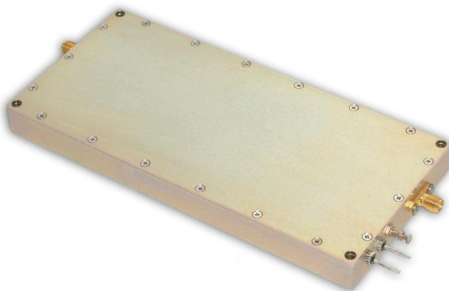


# Linear RF Amplifier

- **Linear Power: 38 dBm**
- **Frequency Response: 1.1 - 1.6 GHz**
- **Saturated Power: 40 dBm**
- **Gain: 24 dB**



**Description:**

Designed for linear application in the 1.1 to 1.6 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: 0709

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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	1.1		1.6	GHz
Power Output Saturated	P <sub>sat</sub>		40		dBm
Power Output P-1dB	P <sub>-1dB</sub>		38		dBm
Gain	G	23	24		dB
Small Signal Gain Flatness	ΔG		±1		dB
Input VSWR	S11			2.0:1	-
Harmonics @ 38dBm	H		-35		dBc
Inter-modulation Point Measured @ 1.5GHz, 100KHz spacing, 1w avg.	IP <sub>3</sub>		+52		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	10	12.5	15	Volt
Operating Current @ 8watts	Amps		2.9	3.2	Amp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Typical 30us OFF, 60us ON.			ms

**MECHANICAL SPECIFICATION**

Parameter	Description	Limits	Units
Dimensions	3 x 7.27 x 0.56	Max	Inch
RF Connectors IN/OUT	SMA in, SMA out	-	-
DC Connectors	Filtered feed-through	-	-
Cooling	Heat-sink not included	-	-
Weight	0.75	Max	lb

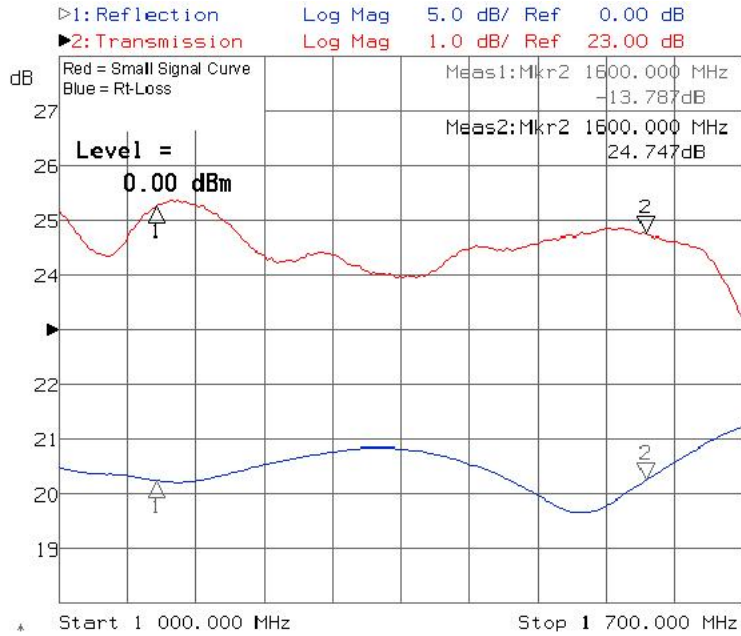
**PROTECTIONS**

Thermal Shutdown	None	Typ
Input Overdrive	None	Max
Load VSWR	4.0:1 up to 10 watts	Max
Reverse Polarity Protection	None	-

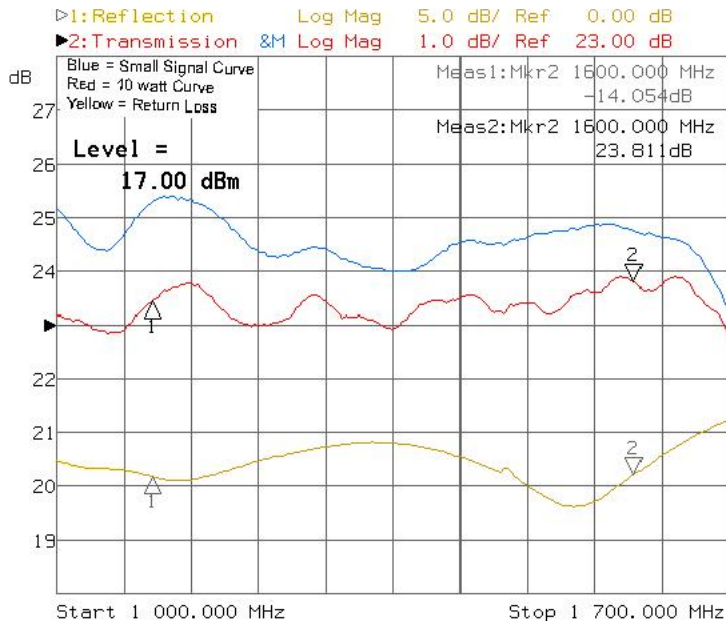
**ENVIRONMENTAL CHARACTERISTICS**

Parameter	Symbol	Min	Typ	Max	Units
Operating Case Temperature	Tc	0°C		+50°C	°C
Storage Temperature	Tstg	-30°C		+100°C	°C
Relative humidity non-condensation	RH	95			%

**Response Curves:**

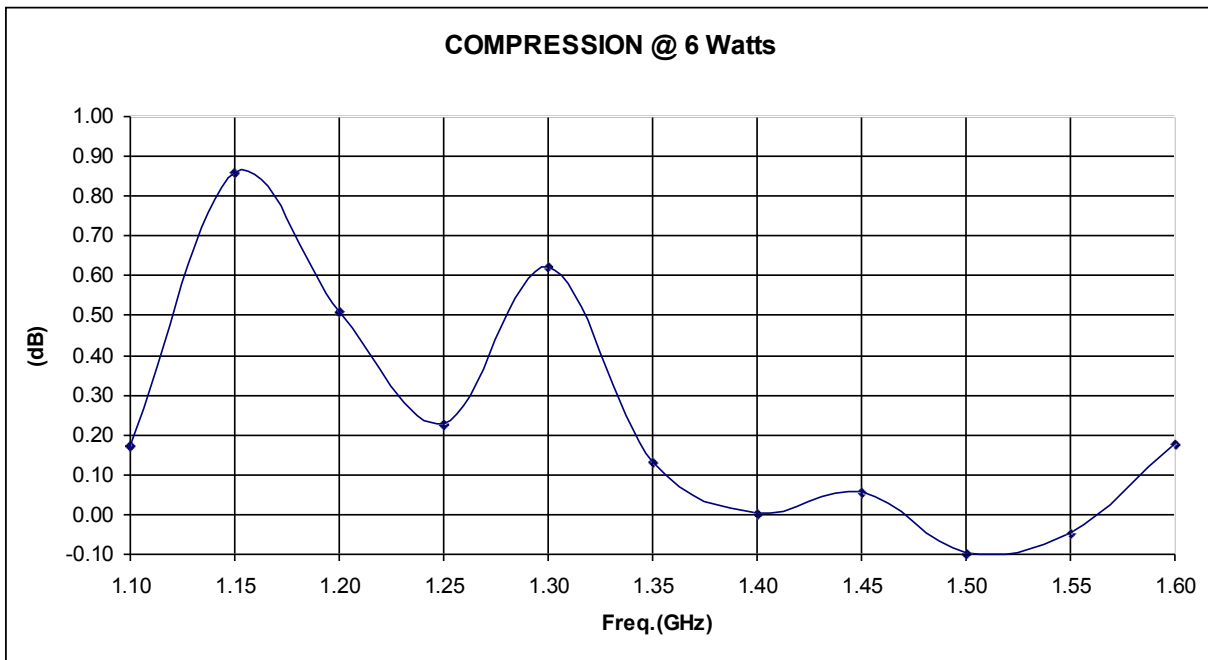
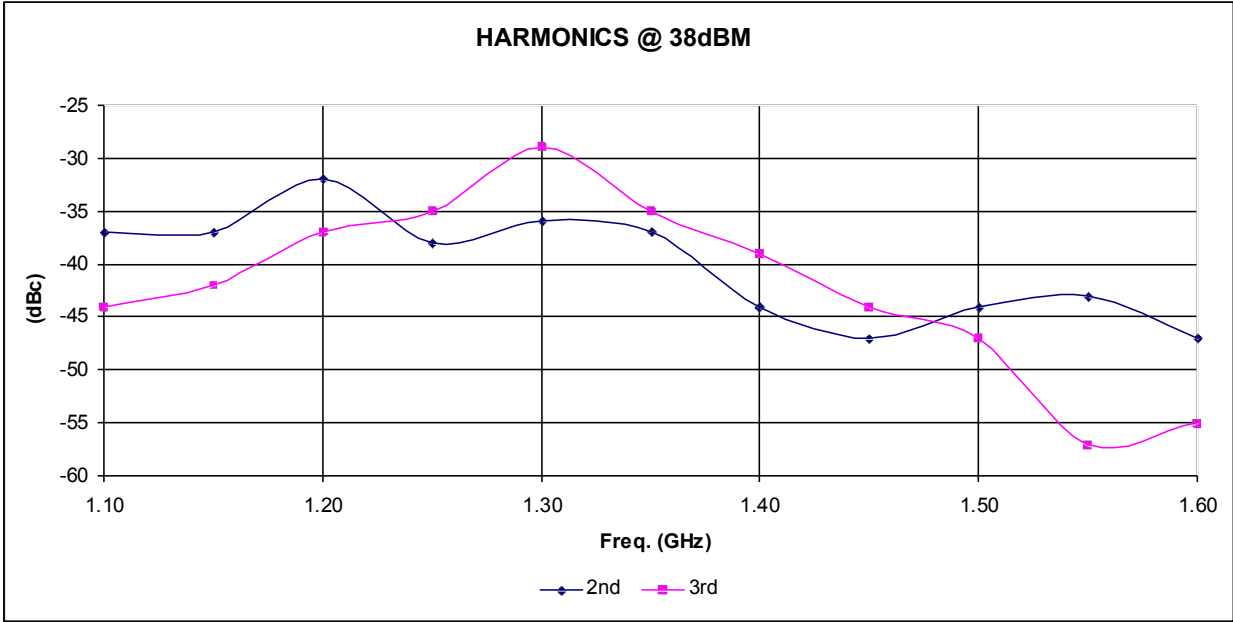


Small Signal Frequency Response Curve



Frequency Response Curve @ 40dBm

**Response Curves:**



Compression @ 6 watts

**Outline Drawing:**

