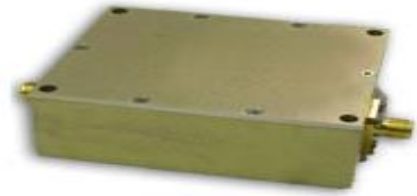


Broadband Linear RF Amplifier

- Frequency Response: 10-1000 MHz
- Linear Power: 1 watt
- Saturated Power: 2 watts
- Gain: 23 dB



Description:

Designed for linear application in the 10 to 1000 MHz range. This amplifier utilizes RF Power MOSFET devices that provide high gain, wide dynamic range and an excellent 3rd order intercept point. Suggested applications: multi-carrier, pulse, AM & FM modulation.

ELECTRICAL SPECIFICATION @ VDD= +28VDC: Temp.=25°C, 50Ω System

0513

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	10		1000	MHz
Power Output Saturated	P _{sat}		2		Watt
Power Output P-1dB	P _{-1dB}		1		Watt
Gain	G	20	23		dB
Small Signal Gain Flatness	ΔG			±1.0	dB
Input VSWR	S11		1.3:1	1.5:1	-
Harmonics @ 1 Watt 2 nd /3 rd	H		-30 / -36	-28 / -30	dBc
Inter-modulation Point 2 Tones, 100mW per tone @ 900 & 901 MHz	IP ₃	+38	+40		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	24	28	30	Volt
Operating Current	mAmps		750	850	mAmp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Not included			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	3.5 x 1.6 x 0.75	Max	Inch
RF Connectors IN/OUT	SMA	-	-
DC Connectors	Filtered feed-through	-	-
Cooling	Heat-sink not included	-	-
Weight		Max	lb

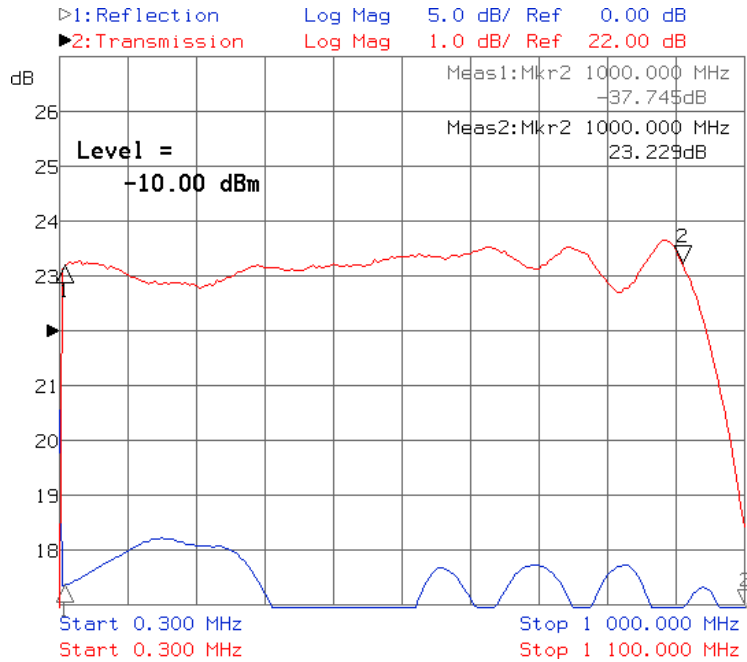
PROTECTIONS

Thermal Shutdown	None	Typ
Input Overdrive	+13 dBm Max	Max
Load VSWR	Infinite up to 1 Watt	Max
Reverse Polarity Protection	None	-

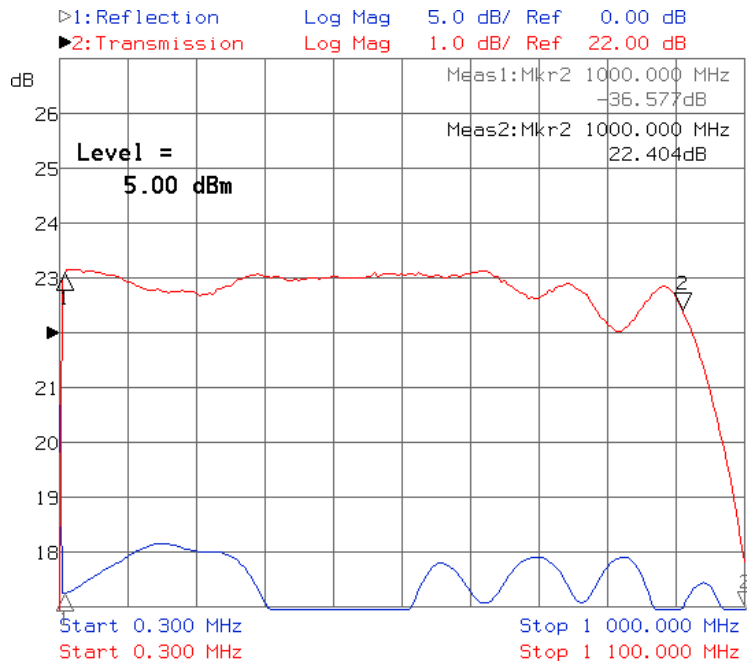
ENVIRONMENTAL CHARACTERISTICS

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 Curve

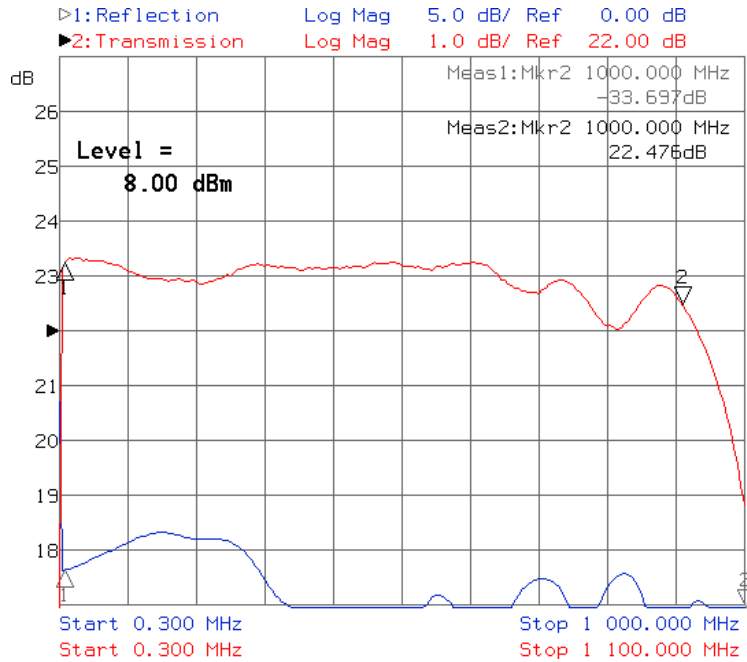


Small Signal Frequency Response Curve

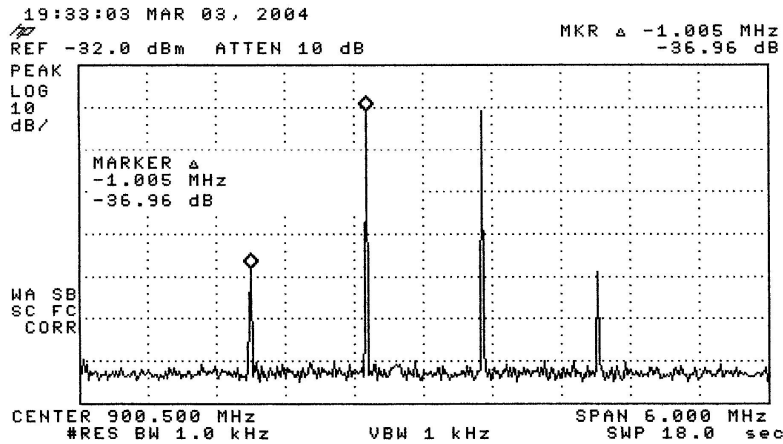


Frequency Response Curve @ 0.5 Watt Output

Response Curve



Frequency Response Curve @ 1 Watt Output



Two Tones 100 mwatts Avg. Per Tone @ 900 & 901MHz
 IP3 = +38dBm

Outline Drawing

