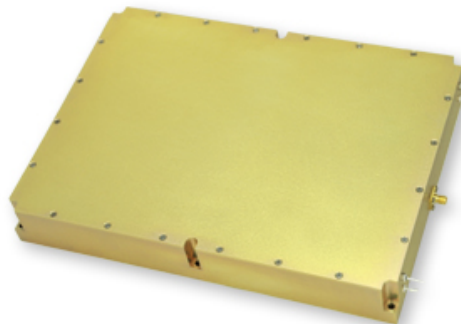


Linear RF Amplifier

- **Frequency Response: 100KHz - 200MHz**
- **Linear Power: 50 watts**
- **Saturated Power: 100 watts**
- **Gain: 53 dB**



Description:

Designed for linear application in the 100 KHz to 200 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.

Updated: 0409

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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	0.100		200	MHz
Power Output Saturated	P _{sat}		100		Watt
Power Output P-1dB	P _{-1dB}		50		Watt
Gain	G	50	53		dB
Small Signal Gain Flatness	ΔG		±1	±1.5	dB
Input VSWR	S11		1.3:1	1.45:1	-
Harmonics @ 50watts 2 nd /3 rd	H		-23/-45		dBc
Inter-modulation Point 2 Tones, 1W per tone @ 50 & 51MHz	IP ₃		56		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	26	28	30	Volt
Operating Current	Amps		7		Amp
Enable / Disable (shut down Pin: gnd=off, open=on)	ms	Typical 20ms OFF, 650ms ON.			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	10.20"x7.40"x1.50"	Max	Inch
RF Connectors IN/OUT	SMA in, SMA out	-	-
DC/Control Connector	Feed-thru Pins	-	-
Cooling	Heat-sink not included	-	-
Weight	5	Typ	lb

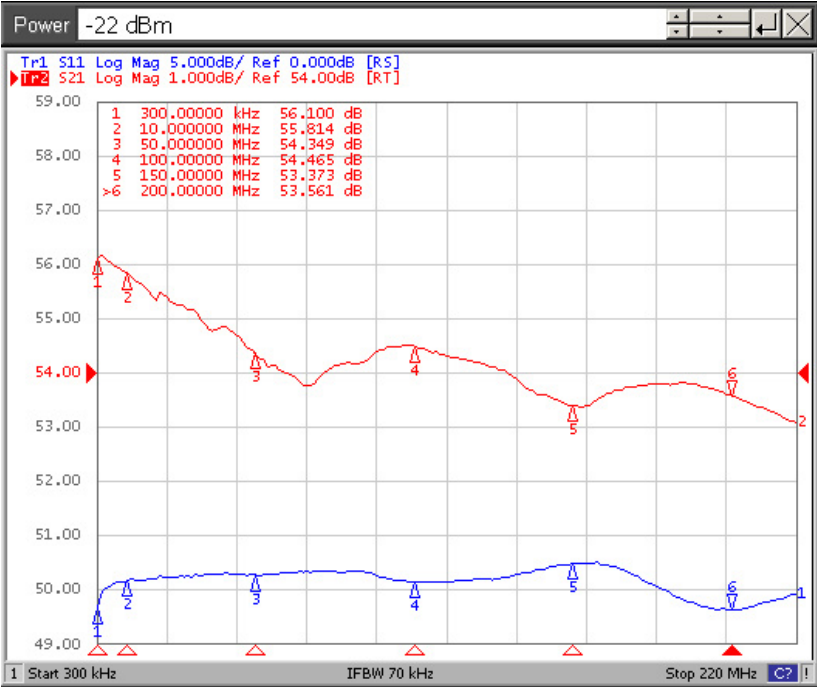
PROTECTIONS

Thermal Shutdown	Bi-metal switch set at 70°C with self reset.	Typ
Input Overdrive	+0dBm Max	Max
Load VSWR	4.0:1 up to 50 watts	Max
Reverse Polarity Protection	None	-

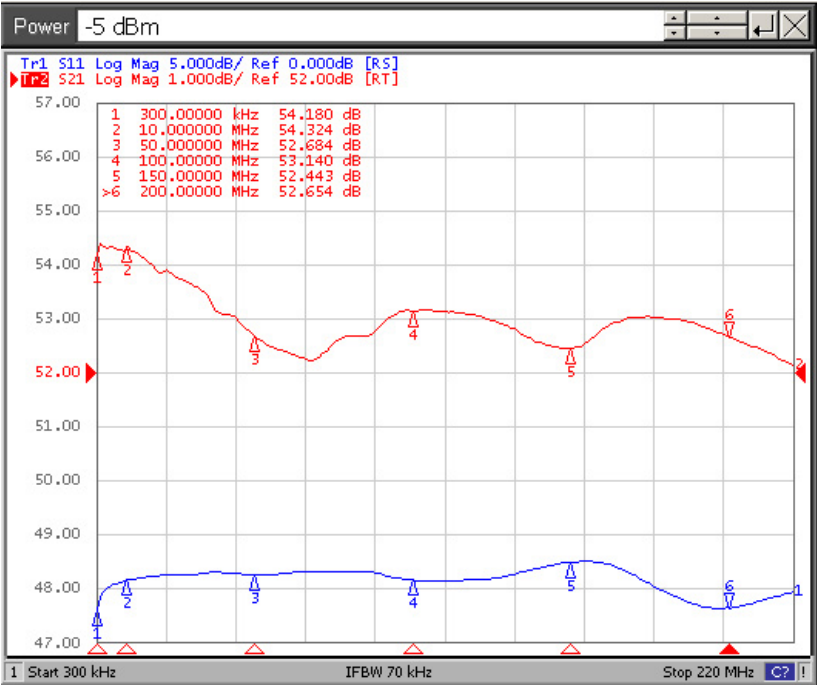
ENVIRONMENTAL CHARACTERISTICS

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

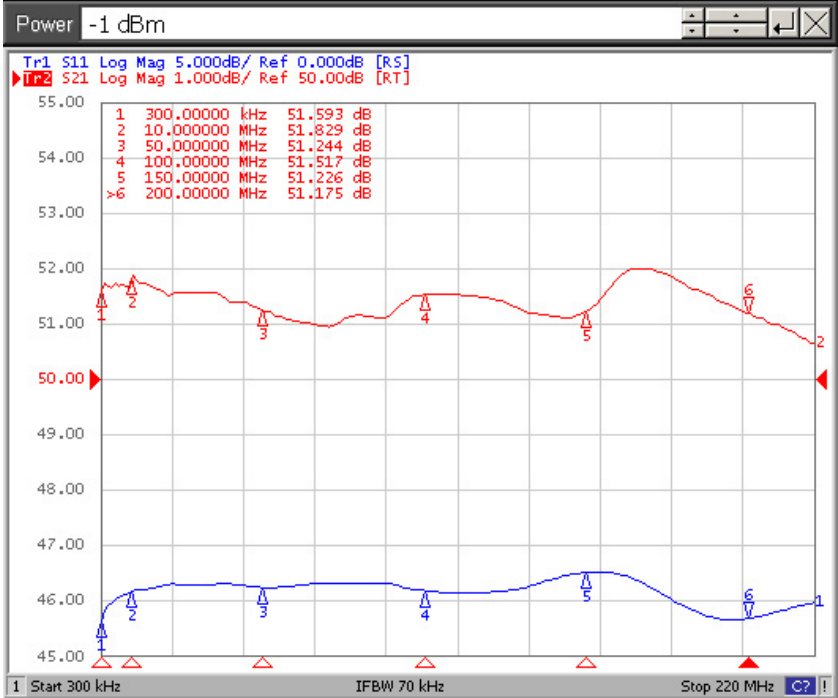


Small Signal Frequency Response Curve



Frequency Response Curve @ 50 Watt Output

Response Curve



Frequency Response Curve @ 100 Watt Output

Outline Drawing

