

Linear RF Amplifier

- **Frequency Response: 100KHz - 200MHz**
- **Linear Power: 50 watts**
- **Saturated Power: 80 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: CW, multi-carrier, AM & FM modulation.

Updated: 0808

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}		80		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		1.45:1	2.0:1	-
Harmonics @ 50watts 2 nd /3 rd	H		-44/-24		dBc
Inter-modulation Point 2 Tones, 1W per tone @ 50 & 51MHz	IP ₃		55		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vac	100	115	240	Volt
Operating Current	Amps			11	Amp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Typical TBD OFF, TBD ON.			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	19" x 17" deep, 3U Rack	Max	Inch
RF Connectors IN/OUT	N in, N out	-	-
Control Connector	BNC/15 pin D-sub	-	-
Cooling	Fan forced heat-sink	-	-
Weight	14	Typ	lb

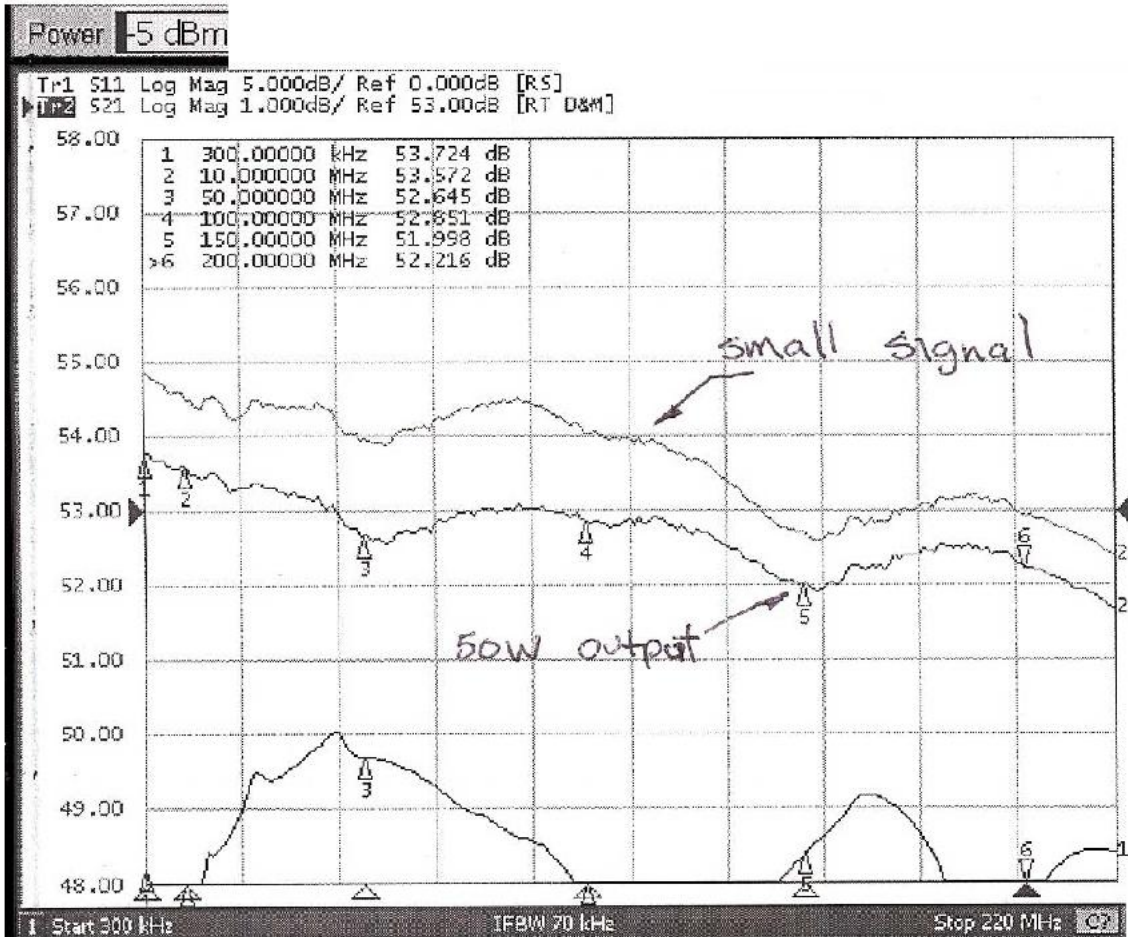
PROTECTIONS

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 Outp