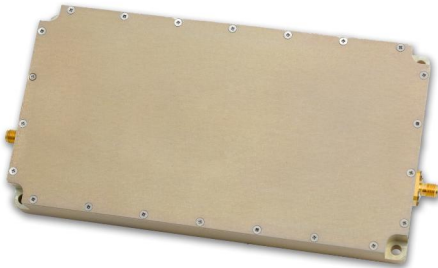


Linear RF Amplifier

- **Frequency Response: 20-550 MHz**
- **Linear Power: 60 watts**
- **Saturated Power: 100 watts**
- **Gain: 52 dB**



Description:

Designed for linear application in the 20 to 550 MHz range. This amplifier utilizes RF Power LDMOS 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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	20		550	MHz
Power Output Saturated	P _{sat}	100	120		Watt
Power Output P-1dB	P _{-1dB}	50	63		Watt
Gain	G	50	52		dB
Small Signal Gain Flatness	ΔG		±1.25	±1.5	dB
Small Signal Gain @ 60w			±1.0		dB
Input VSWR	S11		1.5:1	1.7:1	-
Harmonics @ 60w 2 nd /3 rd	H			-27/18	dBc
Inter-modulation Point 2 Tones, 5W per tone @ 499 & 500 MHz	IP ₃		+61		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	24	28	30	Volt
Operating Current @ 100w	Amps			10	Amp
Enable / Disable (shut down pin: +5v=off, open=on)	ms	Typical: 150us OFF, 10ms ON.			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	5.3 x 2.5 x 1.1	Max	Inch
RF Connectors IN/OUT	SMA	-	-
DC Connectors	Filtered feed-through.	-	-
Cooling	Heat-sink Required	-	-
Weight	14	Max	oz

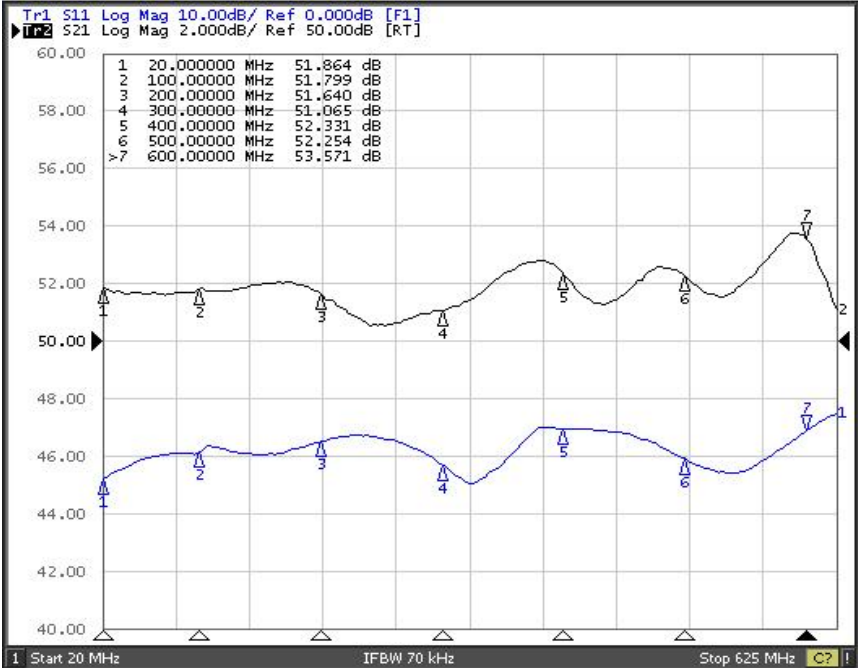
PROTECTIONS

Thermal Shutdown	Bi-metal switch set at 80°C with self reset.	Typ
Input Overdrive	Fold-back overdrive protection to 15 dBm. Momentary	Max
Load VSWR	20:1 up to 100 watts.	Max
Reverse Polarity Protection	Included	-

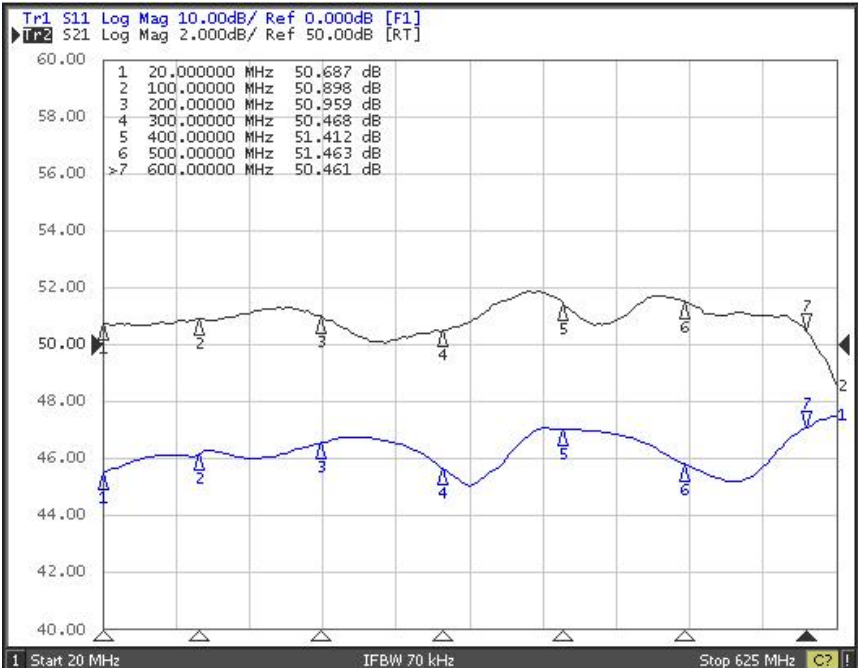
ENVIRONMENTAL CHARACTERISTICS

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

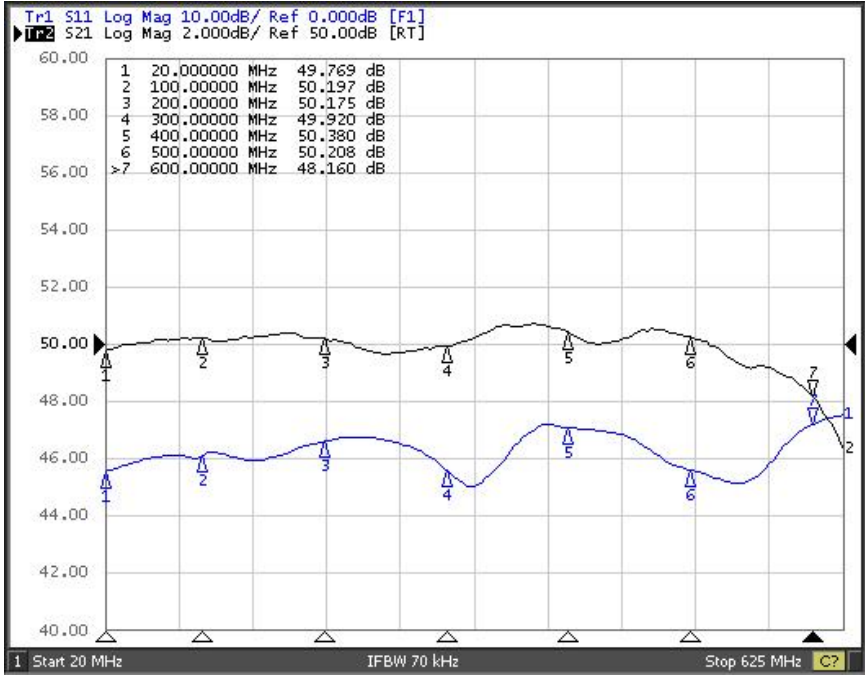


Small Signal Frequency Response Curve / Return-Loss

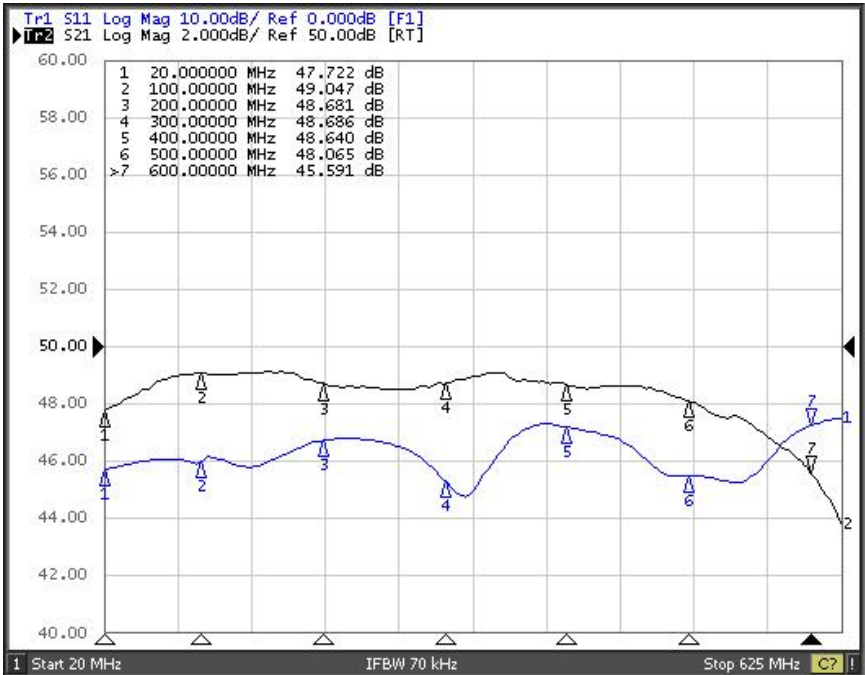


Frequency Response Curve @ 50 Watts Output / Return-Loss

Response Curves



Frequency Response Curve @ 100 Watts Output / Return-Loss



Frequency Response Curve @ Saturated Output / Return-Loss

Outline Drawing

