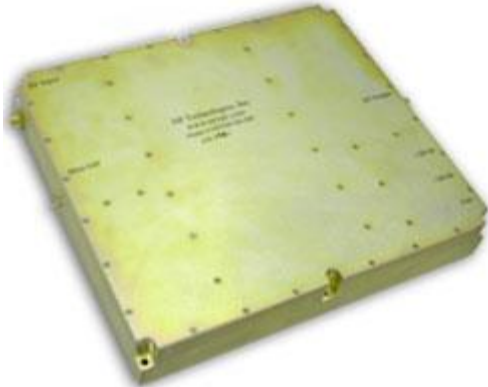


Linear RF Amplifier

- **Linear Power: 300 watts (700-960MHz band)**
- **Usable Frequency Response: 500-1000 MHz**
- **Saturated Power: 400 watts (700-960MHz band)**
- **Gain: 55 dB**



Description:
 Designed for linear application in the 700 to 960 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, pulse, PM, AM & FM modulation.

Updated: 0709

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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	700		960	MHz
Power Output Saturated (700-960MHz)	P _{sat}		400		Watt
Power Output P-1dB (700-960MHz)	P _{-1dB}		300		Watt
Gain	G	53	55		dB
Small Signal Gain Flatness	ΔG		±0.5	±1.2	dB
Input VSWR	S11			1.4:1	-
Harmonics @ 300watts	H		-50		dBc
Inter-modulation Point 2 Tones, 25W per tone @ 900 & x901MHz	IP ₃		+64		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	24	28	30	Volt
Operating Current @ 300watts	Amps		47	53	Amp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Typical 1 ms OFF, 10ms ON.			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	12 x 10.75 x 1.3	Max	Inch
RF Connectors IN/OUT	SMA in, N out	-	-
DC Connectors	High Power D-sub / with mate	-	-
Cooling	Heat-sink not included	-	-
Weight	8.5	Max	lb

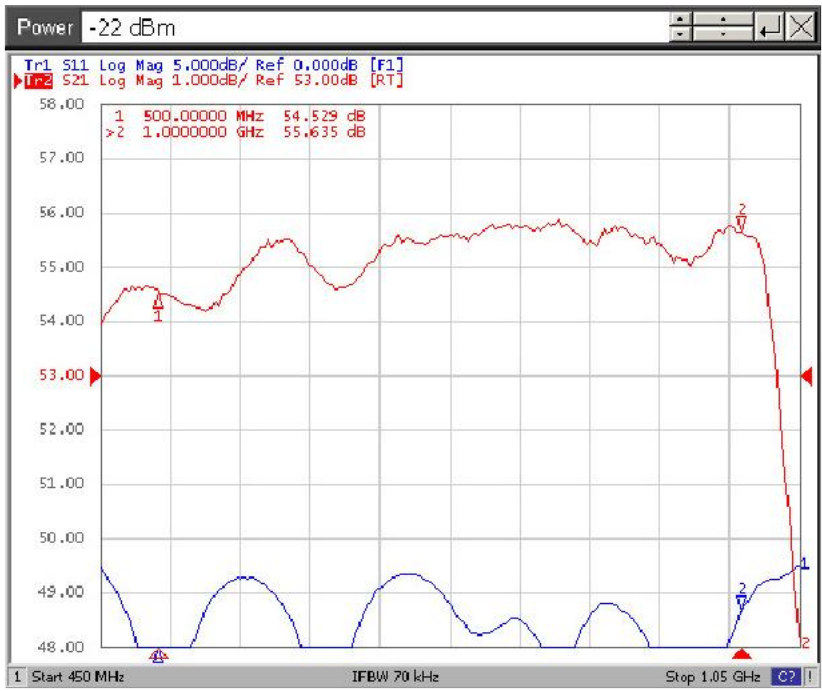
PROTECTIONS

Thermal Shutdown	Bi-metal switch set at 70°C with self reset.	Typ
Input Overdrive	Fold-back overdrive protection to 20 dBm	Max
Load VSWR	4.0:1 up to 300 watts	Max
Reverse Polarity Protection	None	-

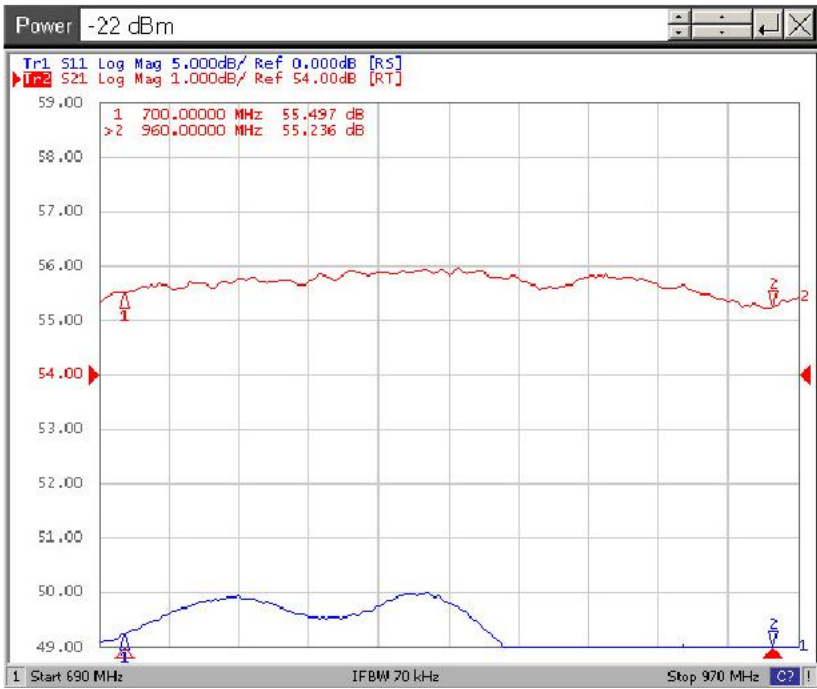
ENVIRONMENTAL CHARACTERISTICS

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

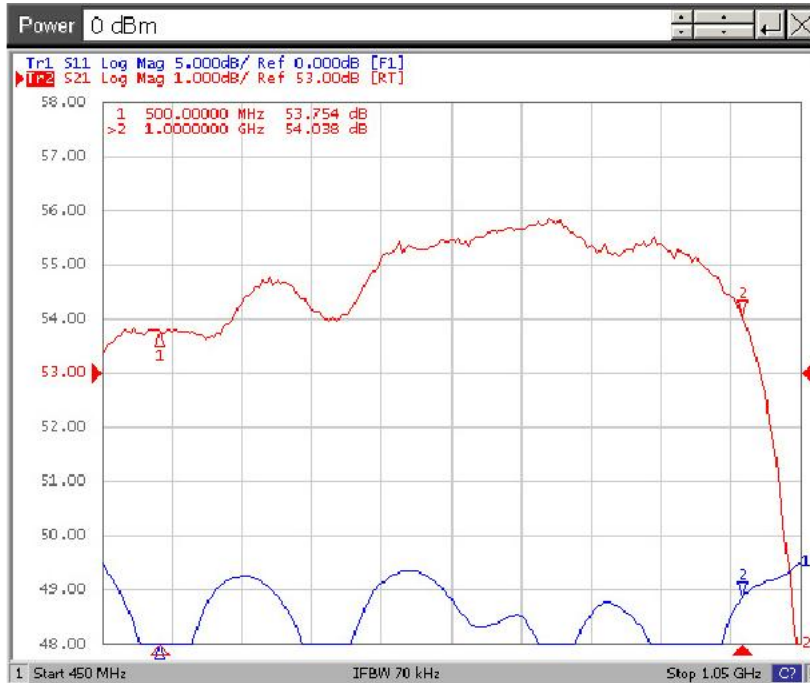


Small Signal Frequency Response Curve
Broadband 500-1000MHz

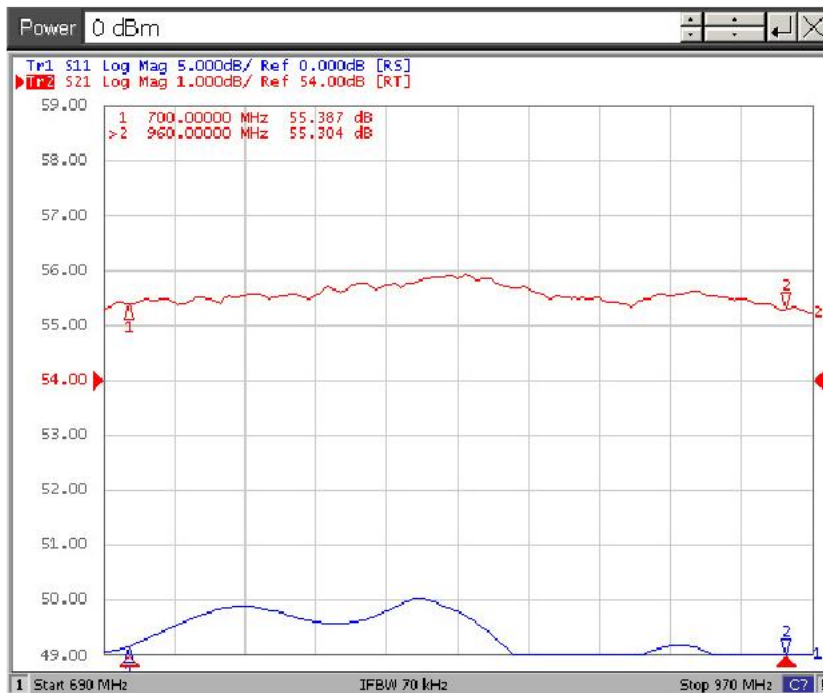


Small Signal Frequency Response Curve
700- 960MHz

Response Curves

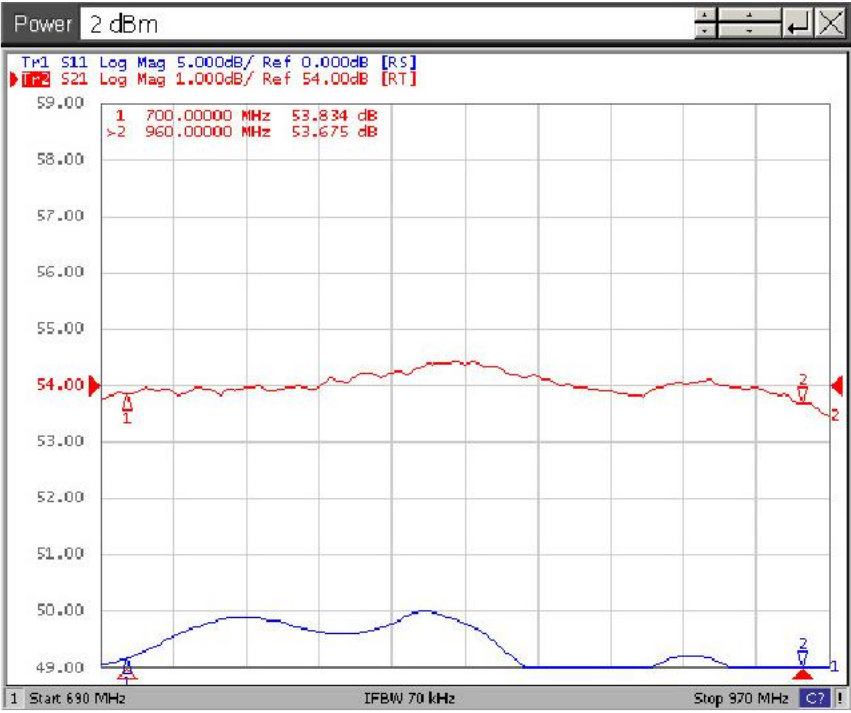


Frequency Response Curve @ 300 Watts Output
 Broadband 500-1000MHz

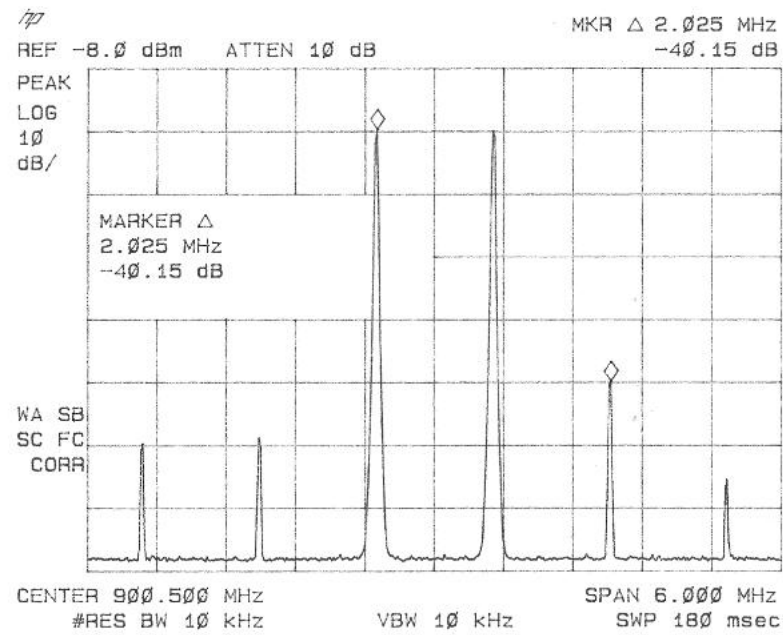


Frequency Response Curve @ 300 Watts Output
 700-960MHz

Response Curves



Frequency Response Curve @ 400 Watts Output
700-960MHz



Two 25 watt CW tones @ 900 & 901 MHz
IP3 = +64dBm

Outline Drawing

