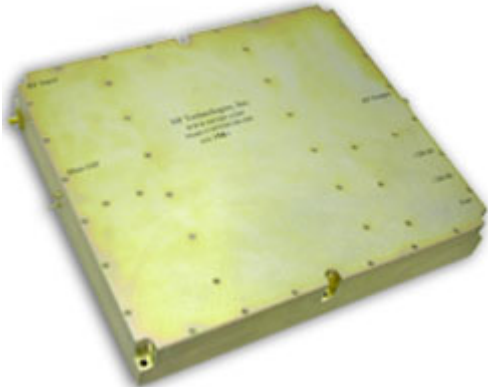


Linear RF Amplifier

- Frequency Response: 500-1000 MHz
- Linear Power: 100 watt
- Saturated Power: 150 watts
- Gain: 50 dB



Description:

Designed for linear application in the 500 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

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	500		1000	MHz
Power Output Saturated	P _{sat}		150		Watt
Power Output P-1dB	P _{-1dB}	80	100		Watt
Gain	G	45	51		dB
Small Signal Gain Flatness	ΔG		±1	±1.5	dB
Input VSWR	S11			2.0:1	-
Harmonics	H		-30		dBc
Inter-modulation Point 2 Tones, 10W per tone @ 959 & x960MHz	IP ₃		+58		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	24	28	30	Volt
Operating Current	Amps		16	20	Amp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Typical 1ms OFF, 10ms ON.			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	11.25 x 9.925 x 1.94	Max	Inch
RF Connectors IN/OUT	SMA in, N out	-	-
DC Connectors	Filtered feed-through	-	-
Cooling	Heat-sink not included	-	-
Weight	9.25	Max	lb

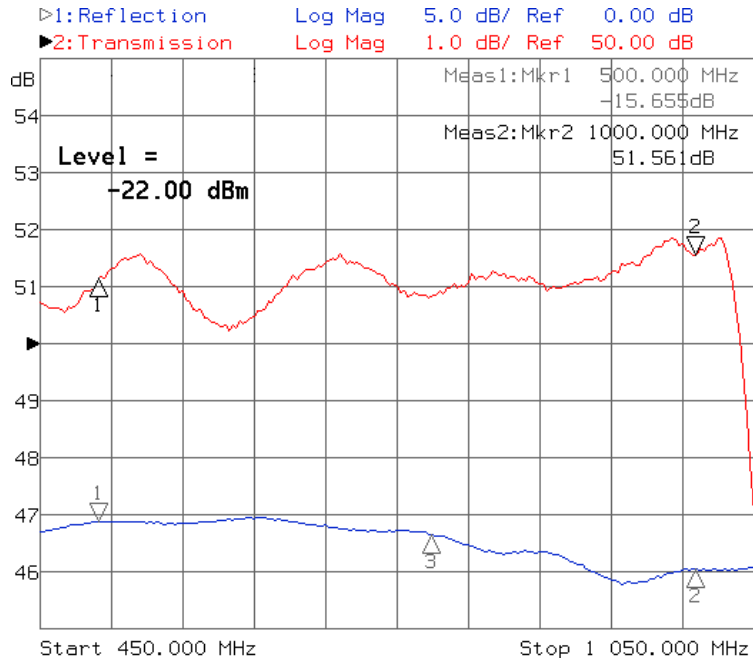
PROTECTIONS

Thermal Shutdown	Bi-metal switch set at 80°C with self reset.	Typ
Input Overdrive	+20dBm Max	Max
Load VSWR	4.0:1 up to 100 watts	Max
Reverse Polarity Protection	None	-

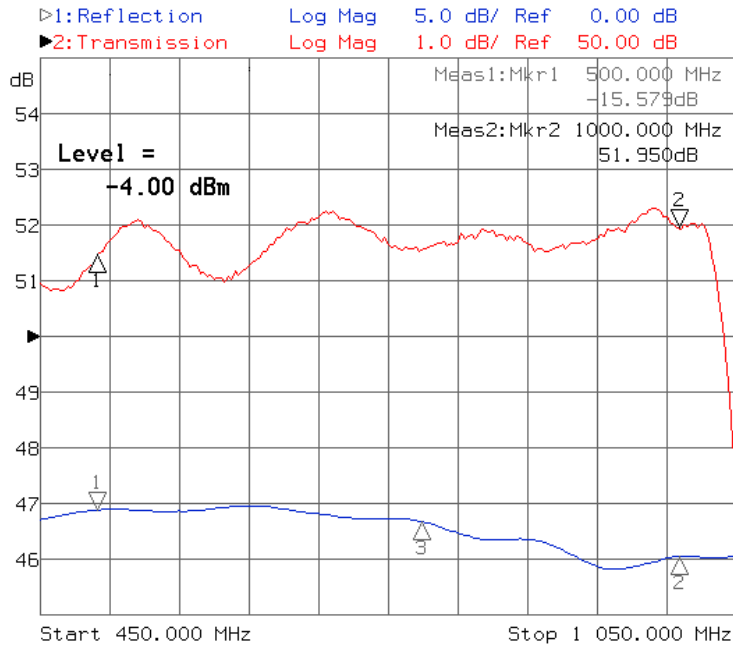
ENVIRONMENTAL CHARACTERISTICS

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

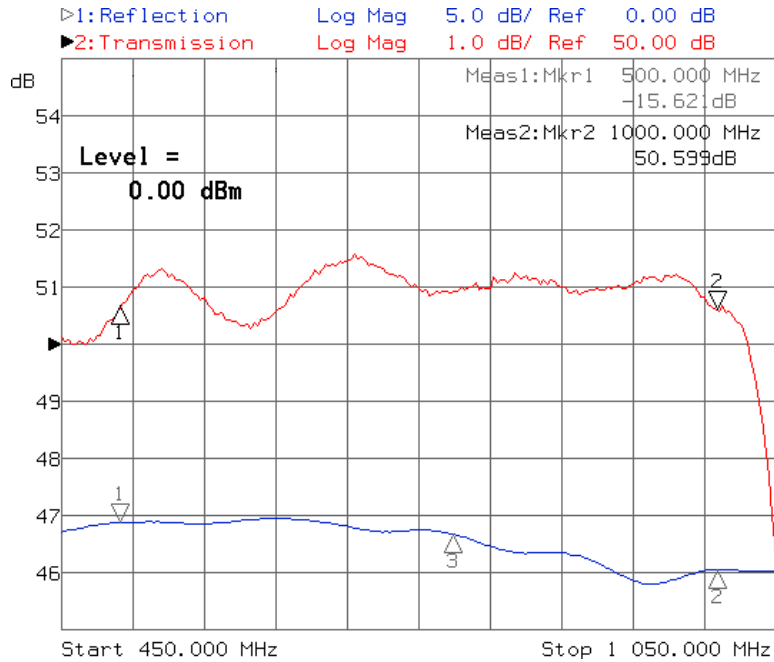


Small Signal Frequency Response Curve

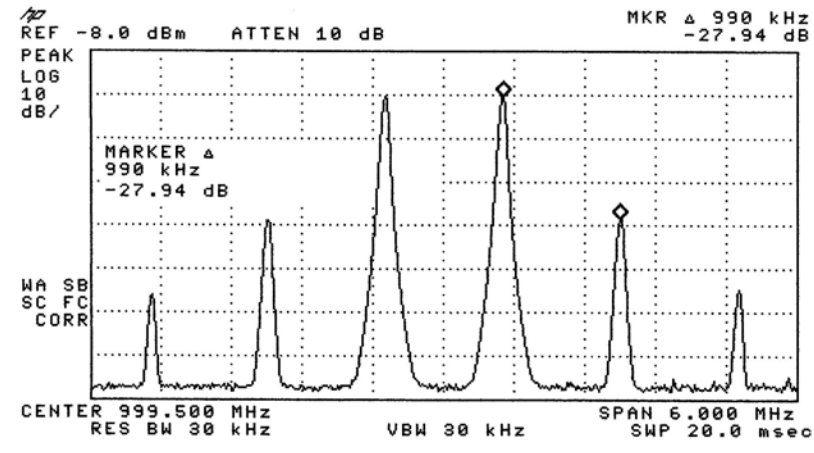


Frequency Response Curve @ 50 Watt Output

Response Curve

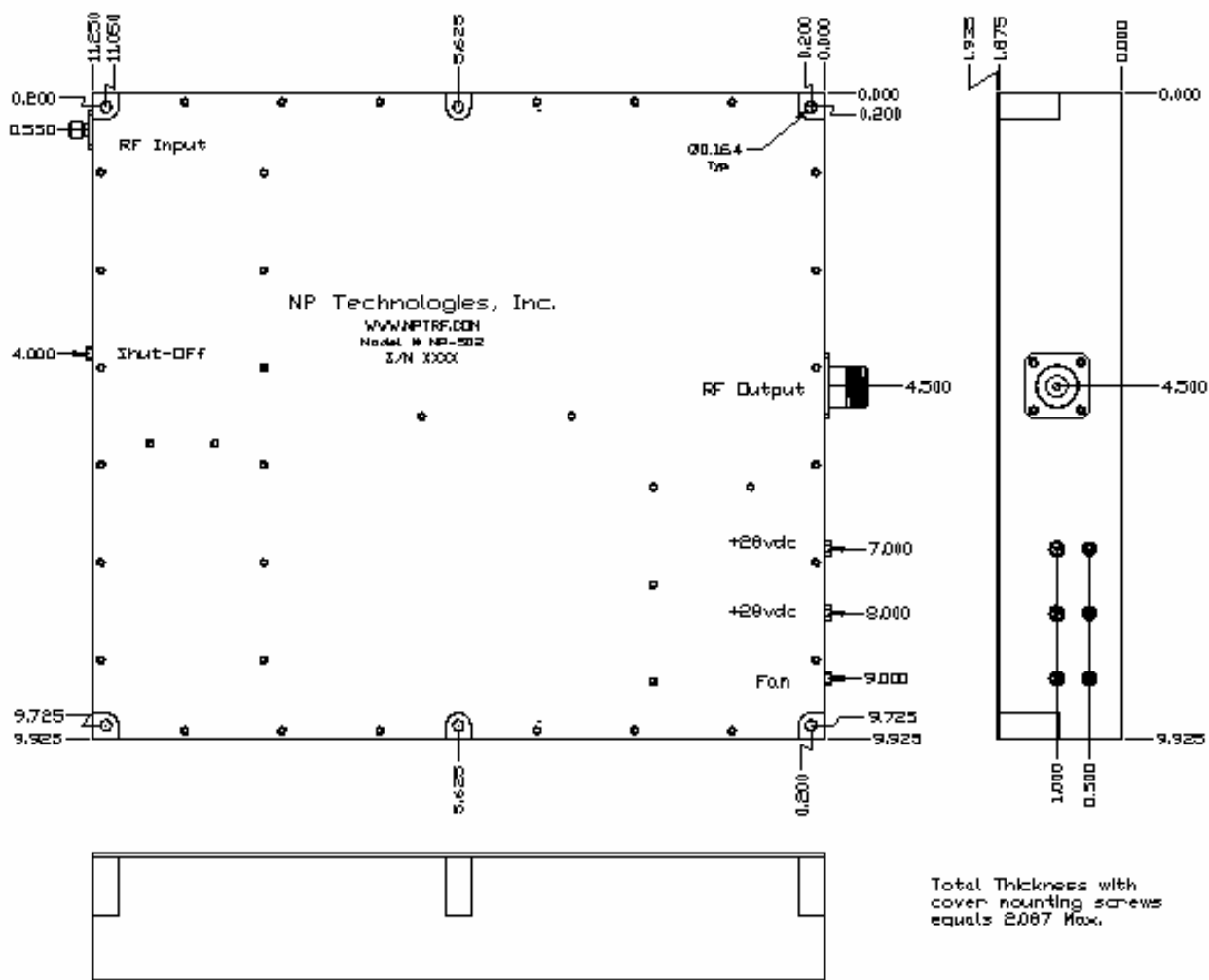


Frequency Response Curve @ 100 Watts Output



Two Tones 25 Watts Avg. Per Tone @ 999 & 1000Mhz IP3 = +58dBm

Outline Drawing



Total Thickness with cover mounting screws equals 2.087 Max.