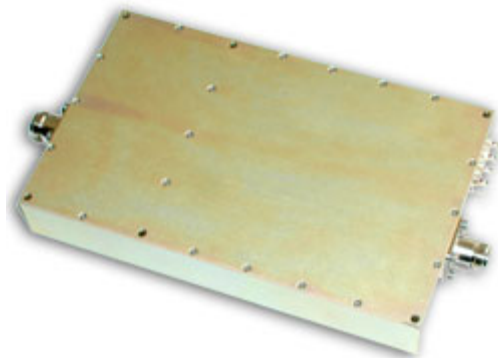


## AM Broadcast Band Amplifier

- Frequency Response: 0.53 -1.7 MHz
- Linear Power: 200 watt
- Saturated Power: 250 watts
- Gain: 65 dB



### Description:

Designed for high power application in the 530 KHz to 1.7 MHz AM broadcast band range. 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	0.53		1.7	MHz
Power Output Saturated	P <sub>sat</sub>		250		Watt
Power Output P-1dB	P <sub>-1dB</sub>	180	200		Watt
Gain	G	63	65		dB
Small Signal Gain Flatness	ΔG			±0.5	dB
Input VSWR	S11		1.3:1	1.4:1	-
Harmonics	H		-30	-25	dBc
Inter-modulation Point 2 Tones, 12.5W per tone @ 1 & 1.1 MHz	IP <sub>3</sub>		+60		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	Vdc	24	28	30	Volt
Operating Current	Amps		13		Amp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Typical: 1ms OFF, 10ms ON.			ms

### MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	8 x 4.9 x 1.25	Max	Inch
RF Connectors IN/OUT	N	-	-
DC Connectors	Filtered feed-through	-	-
Cooling	Heat-sink not included	-	-
Weight	2.5	Max	lb

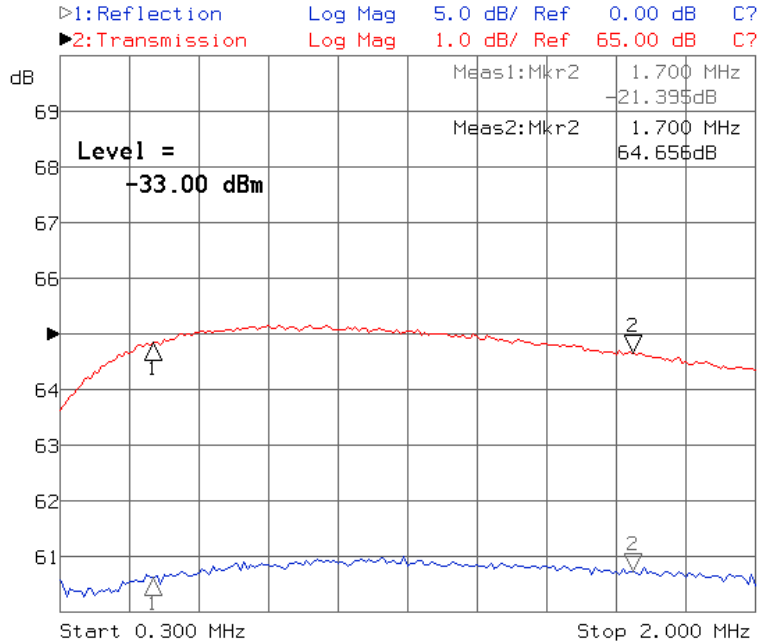
### PROTECTIONS

Thermal Shutdown	Bi-metal switch set at 70°C with self reset.	Typ
Input Overdrive	0dBm Max	Max
Load VSWR	3.0:1 up to 200 Watts	Max
Reverse Polarity Protection	Included	-

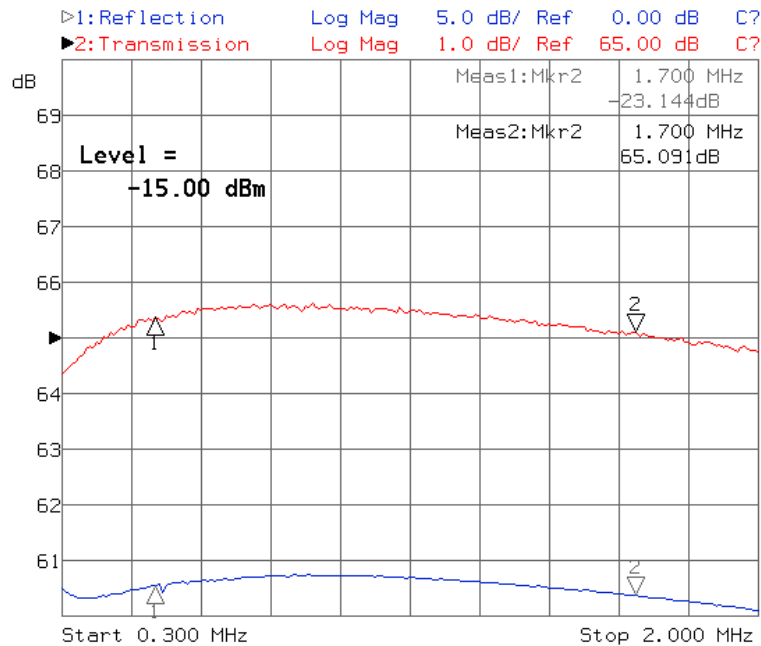
### ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Units
Operating Case Temperature	T <sub>c</sub>	0°C		+50°C	°C
Storage Temperature	T <sub>stg</sub>	-30°C		+100°C	°C
Relative humidity non-condensation	RH	95			%

## Response Curve

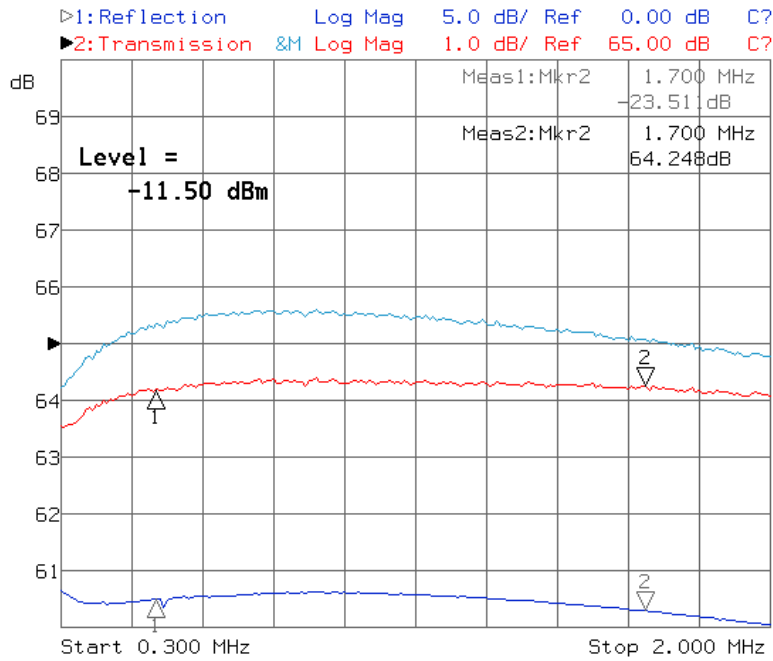


### Small Signal Frequency Response Curve

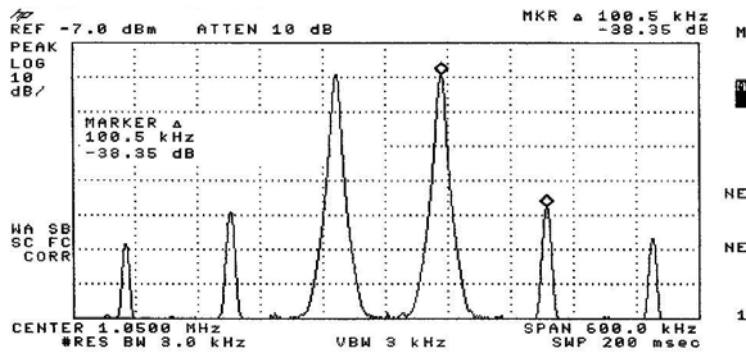


### Frequency Response Curve @ 100 Watts Output





Compression at P-1 db



Two Tones 12.5 Watts Avg. Per Tone @ 1 & 1.1 MHz  
 IP3 = +60dBm

**NP**

Technologies, Inc.



**NP-505**

**Outline Drawing**

