



5300 Beethoven Street, Los Angeles, CA 90066
 TEL: (310)306-5556 • FAX: (310)821-7413
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 4081
700 - 800 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER

**Solid State
 Broadband High
 Power RF Amplifier**

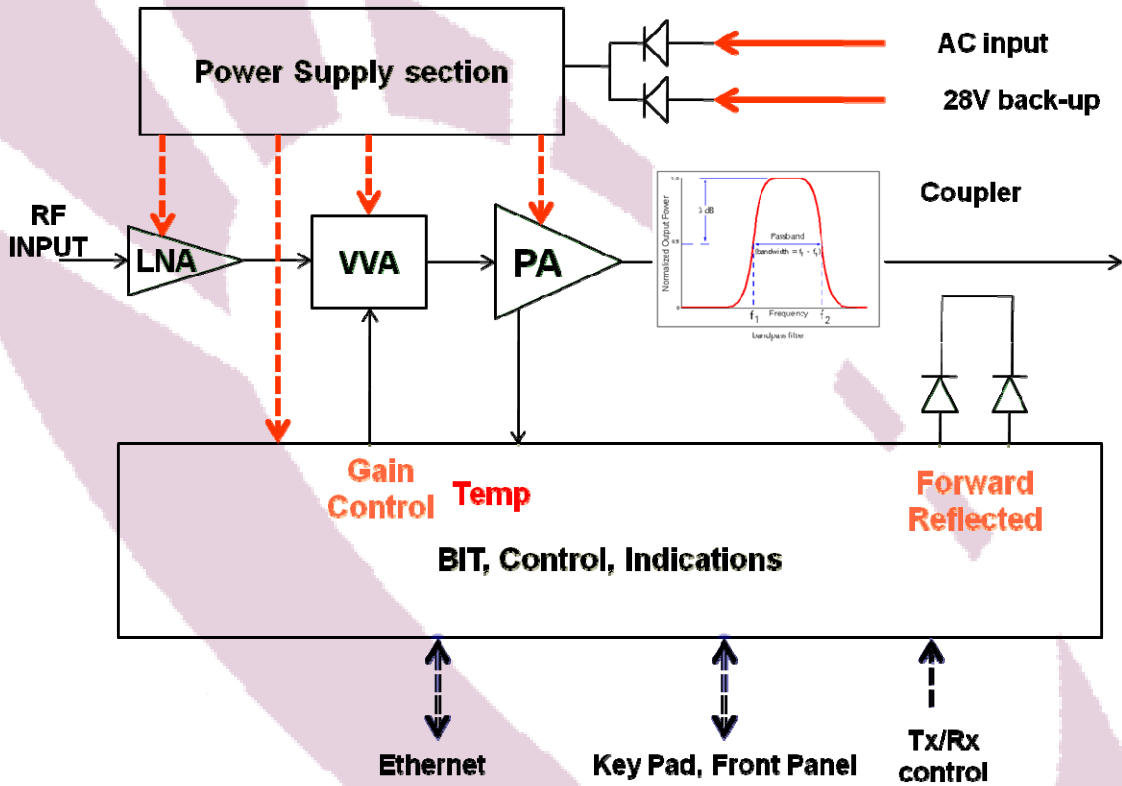
The 4081 is a 100 Watt broadband amplifier that covers the 500 – 1000 MHz frequency range. The bandwidth is limited by the BPF to 700 to 800MHz. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

	<u>Parameter</u>	<u>Specification @ 25° C</u>
<u>Electrical</u>		
1	Frequency Range	700 – 800 MHz
2	Output Power @1dB back off	100 Watts min
3	Small Signal Gain	+53 dB min
4	Small Signal Gain Flatness	+/-1.0 dB max with no ALC +/- 0.5dB with ALC
5	BPF rejection	20dB min. at 655 & 850 MHz Ultimate attenuation: 60dB min. VSWR: 1.5:1 in the pass band
6	Input /Output VSWR	2:1 max
7	Harmonics	-60 dBc max
8	Spurious Signals	-60 dBc max
9	Input/Output Impedance	50 Ohms nominal
10	AC/DC Input Power consumption	600 Watts max
11	AC Input	100 – 240 VAC, single phase
12	Back-up DC input	28V nominal
13	RF Input for 100W out	0 dBm nominal
14	RF Input Signal Format	Burst & Continuous
15	Class of Operation	A/AB
16	Noise Figure	8dB max
17	Interface	RS232, Ethernet, Front panel
<u>Mechanical</u>		
17	Dimensions	19" x 5.25" x 20"
18	Weight	60 lb. max
19	Front Connectors	Type-N for RF
20	Rear Connectors	AC plug: Standard Terminal lug: 28V back-up RS232 - 9pin D-sub Ethernet - standard
21	Grounding	Chassis, and terminal lug
22	Cooling	Internal Forced Air
<u>Environmental</u>		
23	Operating Temperature	-20° C to +55° C
24	Operating Humidity	95% Non-condensing
25	Operating Altitude	Up to 10,000' Above Sea Level
26	Shock and Vibration	Normal Truck Transport

MODEL 4081

700 - 800 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER



CIRCUIT PROTECTIONS, INDICATIONS, CONTROL

ETHERNET and/or FRONT PANEL

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage
- ◇ VSWR protection
- ◇ RF Output power level
- ◇ High RF In @ +10dBm

CIRCUIT INDICATIONS

- ◇ Forward Power
- ◇ Reflected power
- ◇ VSWR Fault
- ◇ Temp Fault
- ◇ Gain Setting (VVA) %

CIRCUIT CONTROL

- ◇ Standby (amplifier disable) - default state after power up
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset
- ◇ ALC On/ Off
- ◇ Discrete Tx command - Ground is Tx (pull up internally to "High")

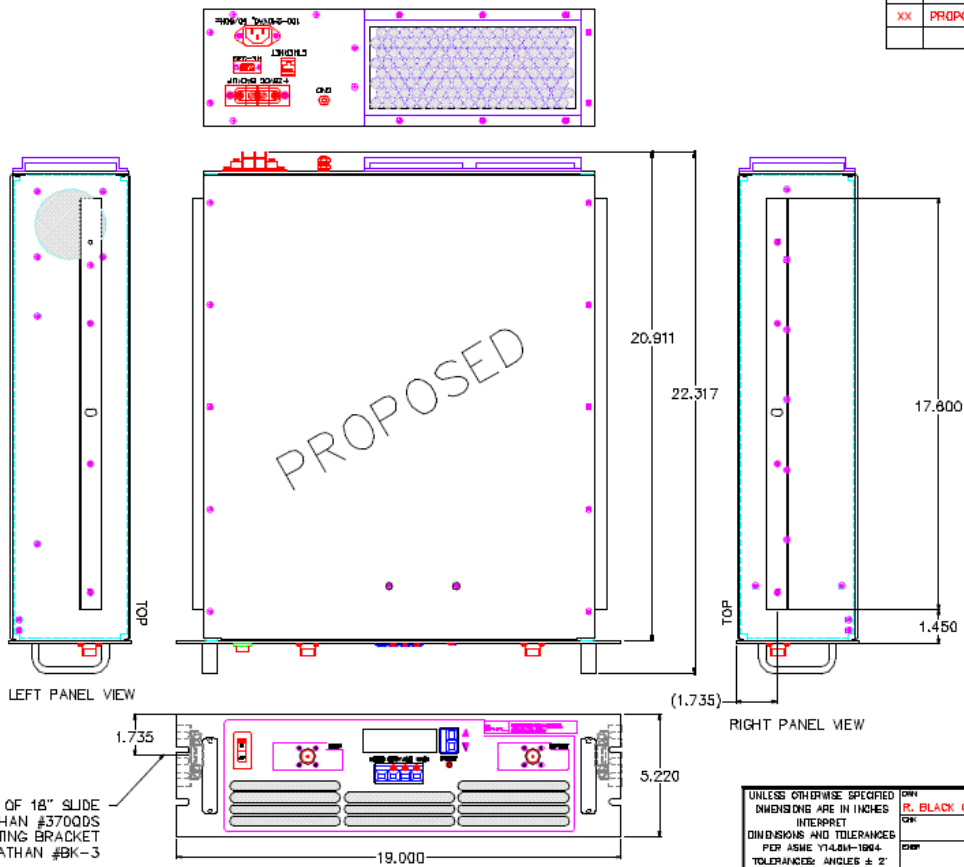


5300 Beethoven Street, Los Angeles, CA 90066
 TEL: (310)306-5556 • FAX: (310)821-7413
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 4081
700 - 800 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER

RESTRICTION ON USE, DUPLICATION OR DISCLOSURE OF PROPRIETARY INFORMATION
 This document contains proprietary information which is the sole property of Ophir RF Inc.

REVISION HISTORY			
REV	DESCRIPTION	DATE	REVISED BY
XX	PROPOSED	06/03/08	R. BLACK



LEFT PANEL VIEW
 RIGHT PANEL VIEW
 CENTERLINE OF 18" SLIDE JONATHAN #3700DS & MOUNTING BRACKET JONATHAN #BK-3

NOTES: UNLESS OTHERWISE SPECIFIED.

UNLESS OTHERWISE SPECIFIED		DWG DATE	R. BLACK 06/03/08	
DIMENSIONS ARE IN INCHES		DWG DATE	06/03/08	
INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994		TITLE		
TOLERANCES: ANGLES ± 2°		PROPOSED RF AMPLIFIER		
.XX ± .01		700-800GHZ, 100W		
.XXX ± .005		Dwg No		
SURFACE FINISH		D		
THIRD ANGLE PROJECTION		REV		
1:1		PROPOSED 4081FE		
SCALE		REV X1		
1:1		SHEET 1 OF 1		