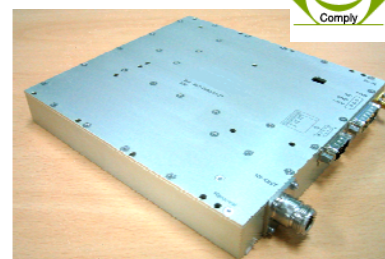


Product Features

- Solid-state linear design
- Small and light weight
- Suitable for CDMA
- 50 Ohm Input/Output impedance
- High reliability and ruggedness
- Built in Output Isolator
- Built in monitoring circuit
- High efficiency

Application

- CDMA Repeater



Description

This HPA Module is a high gain, wide dynamic range amplifier module. It has superior performance comes with a modest price tag. Custom design available.

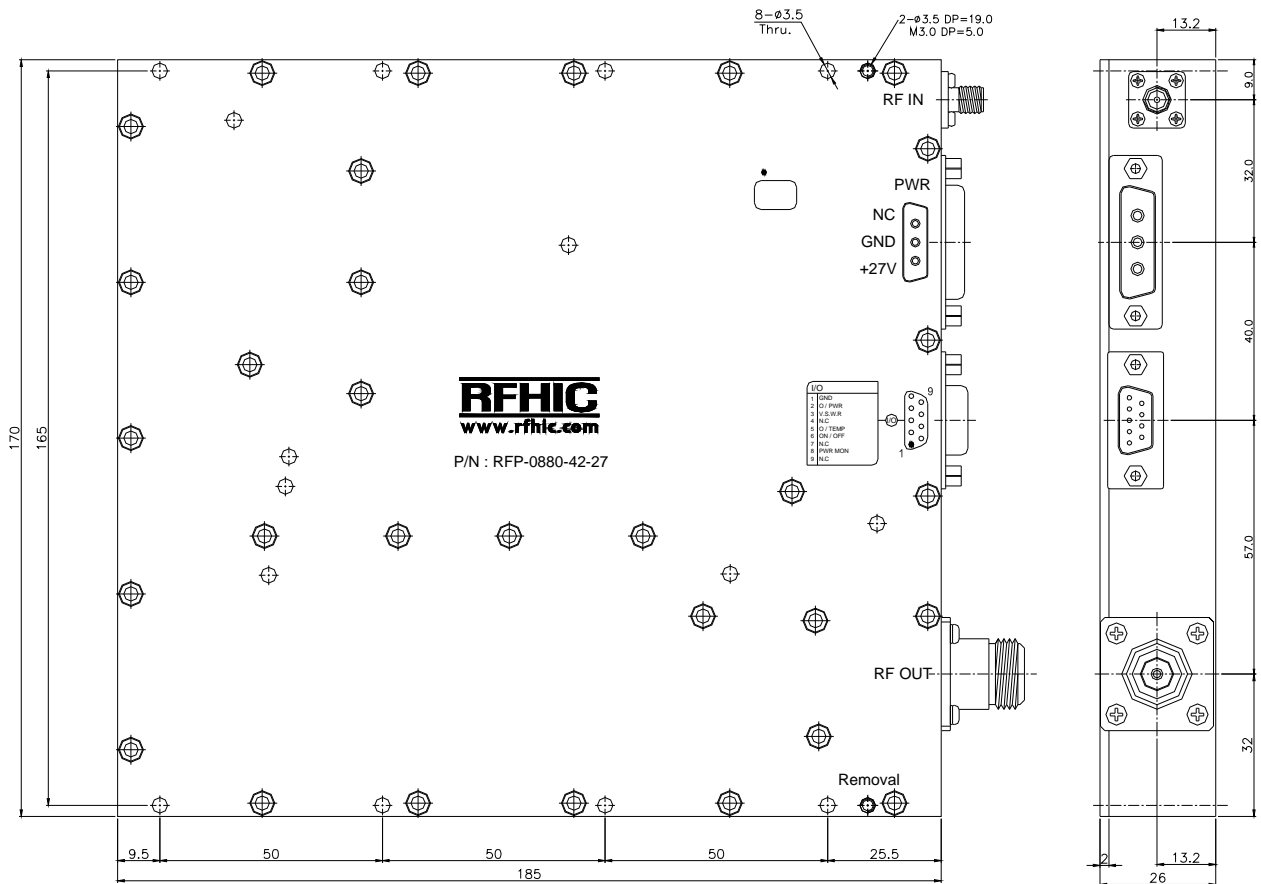
Electrical Specifications @ VDD=+27VDC, T=25°C, 50Ω System

PARAMETER	Symbol	Specification	
Frequency Range	BW	875 ~ 890MHz	
Output Power	P	42dBm/4FA (CDMA)	
In-Band Spurious Emissions (@9CH CDMA Po=42dBm_4FA)	SE	@27Volt RBW 30KHz	Fo±750KHz ≤-48dBc (min)
			Fo±1.98MHz ≤-63dBc (min)
RF Gain	G	50dB ±1dB @frequency range, +27V,	
Gain Flatness	ΔG	±0.5dB peak to peak	
Gain Variation Over Dynamic Range	ΔG _{TEMP}	±0.5dB max. @ Po=+20dBm~+42dBm(ΔPin:-22dB), 27V, +25 °C	
Normal Operating Voltage	VDC	+27V ±1V	
Input Return Loss	S11/S22	-18dB min.	
Output Protection		Mismatch Protected with Isolator (Over temp. & Voltage & Power, Output mismatch)	
Harmonics (2nd)	H	-45dBc min.	
Current Consumption	IDD	5.5A max. @+27V, +25 °C, Po=+42dBm	
		0.5A max. @ 'DISABLE' state	
Operating Temperature	OT	-20 °C ~ + 70 °C (CASE TEMP)	
Over power shutdown	OPS	47dBm±0.5dB	
Detect Accuracy		±0.5dB	Po=+21dBm~+42dBm
		±1dB	Po=+0dBm~+10dBm
Impedance		50Ω	

Interface Connectors

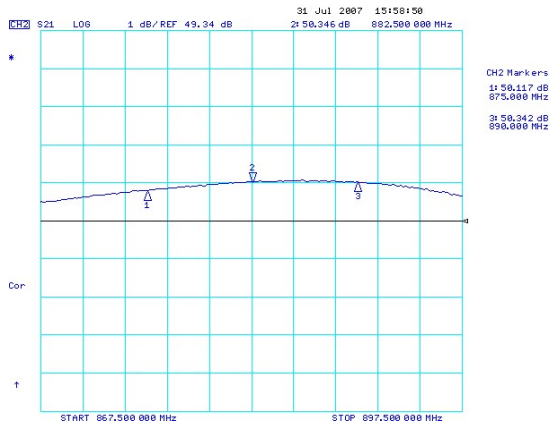
Alarms/ Interface D-Sub, 9-Pin	1. GND	
	2. Over Power alarm	6~10sec delay shutdown@45dBm, immediately shutdown@47dBm (TTL=HIGH)
	3. VSWR alarm	Output Port open, Pout >31dBm (TTL=HIGH)
	4. NC	Enable : TTL Low & GND / Disable : TTL High & Open
	5. Over Temp. Alarm & Shutdown	90°C±5°C (shutdown), 70°C±5°C (auto recovery) TTL High Alarm
	6. Enable/Disable	Enable : TTL Low & GND / Disable : TTL High & Open
	7. NC	
	8. Power monitor	4V@42dBm_4FA / [0.1V/dBm]
	9. NC	
Connectors	INPUT [SMA/Female]	OUTPUT [N-Type/Female]
Physical dimension (L X W X H) in mm	185 X 170 X 26(mm)	

OUTLINE DRAWING

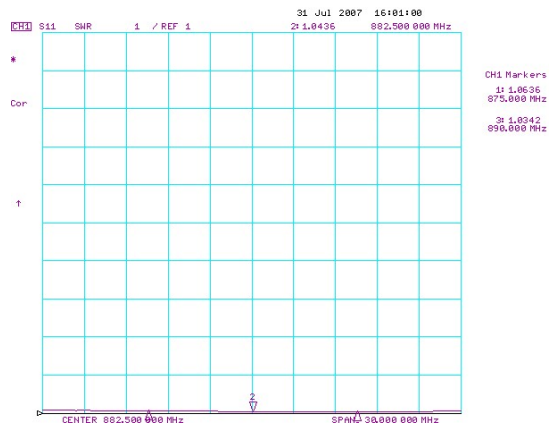


TYPICAL PERFORMANCE

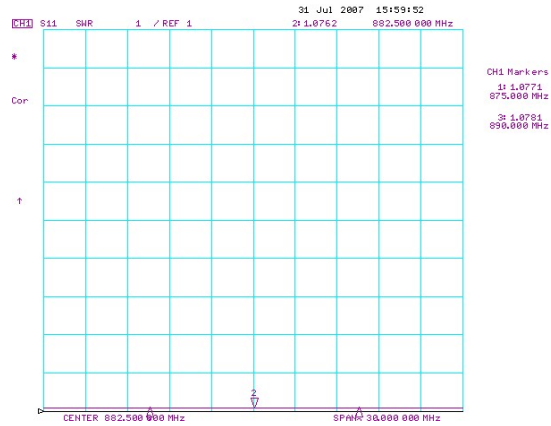
Gain & Gain Flatness



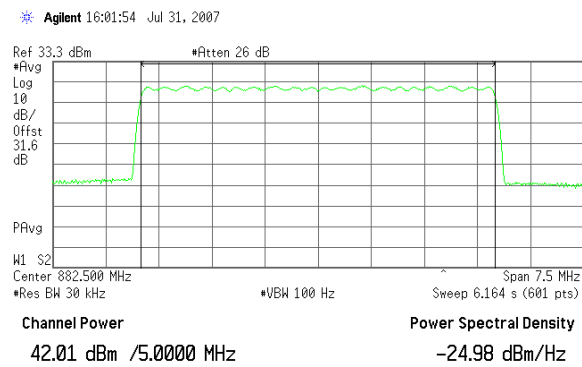
S22



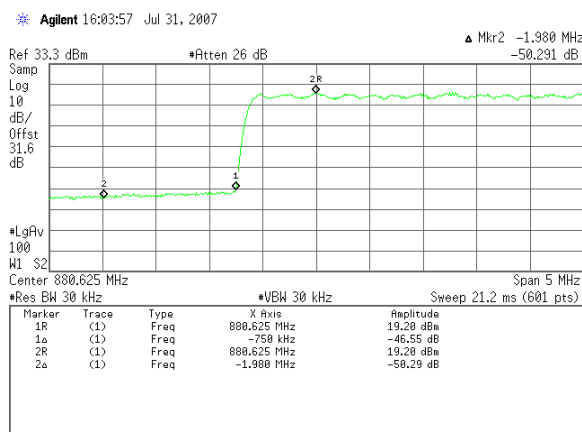
S11



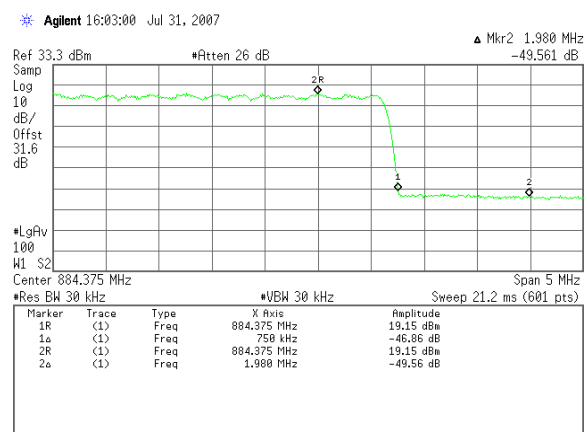
Output Power



Spurious Emissions(Lower)



Spurious Emissions(Upper)



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