

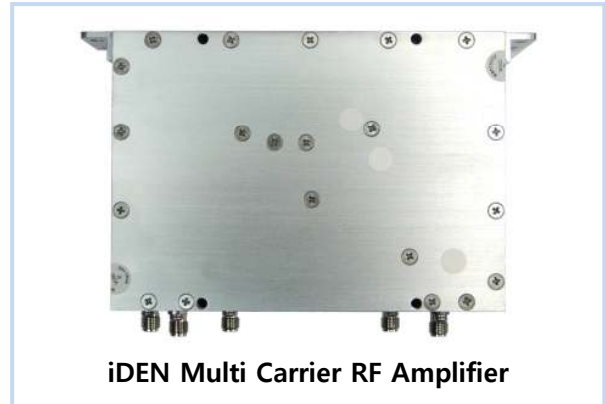
## Product Features

- High power RF amplifier
- Solid State power amplifier
- High linearity and high efficiency
- 50 ohms input / output impedance

## Application

- iDEN Repeater

## Electrical Specification



Parameter	Specification	Remark
Frequency Range	UL800 806~824MHz	
	UL900 896~901MHz	
Output Power	+27dBm	
Gain	37dB±1dB	
Gain Flatness	0.5dB peak to peak	
Gain Variation Over Temp.	±1dB max.	
ACLR	±25kHz< -49dBc	iDEN 8 Carrier
	±50kHz< -54dBc	
Input VSWR	1.5:1 max	
Output VSWR	1.5:1 max	
DC Current Consumption	+7V 1.0A max	
	+27V 2.0A max	
Enable	TTL Low	
Output Detect	+2.2V@Po=+27dBm	0.05V/dB
Coupling Port	20dB	900MHz only



### Environmental Specification

Parameter	Specification	Remark
Operating Temperature	-20°C~+60°C	
Storage Temperature	-30°C~+80°C	
Relative Humidity	0%~90%	Non-condensing

### Mechanical Specification

Physical Dimension : 125mm X 90mm X 38mm

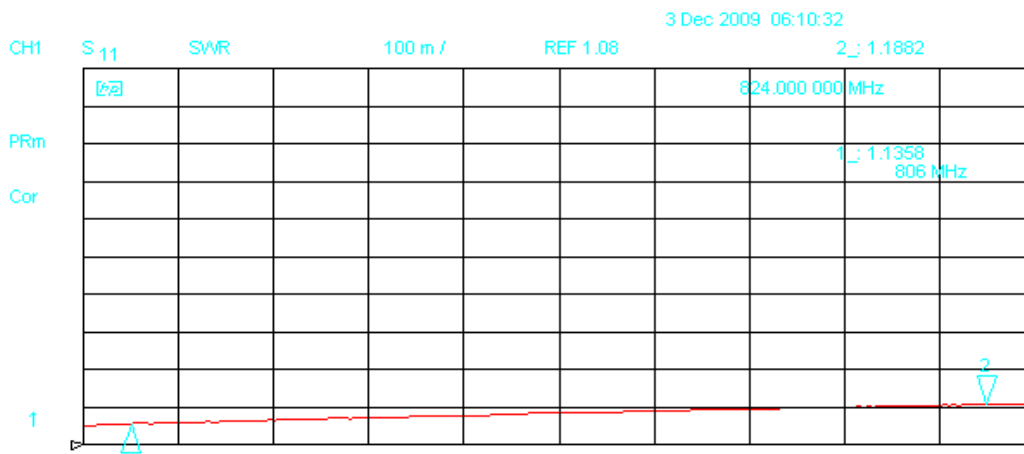
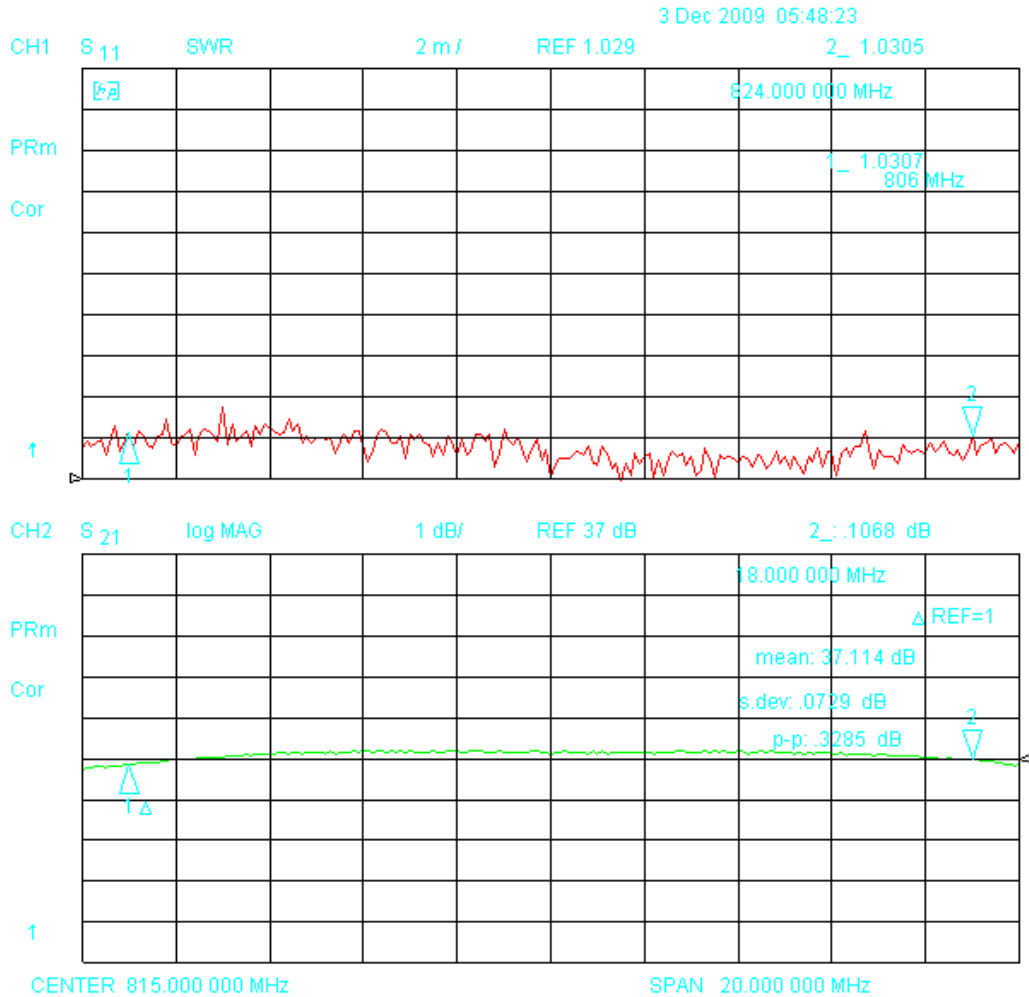
### Pin Assignment

I/O Interface (SMAW250-11P)	1. Temp. SDA	I2C
	2. Temp. SCL	I2C
	3. 800MHz Fault Alarm	TTL High
	4. 900MHz Fault Alarm	TTL High
	5. 800MHz Power Monitor	+2.2V@Po=+27dBm
	6. 900MHz Power Monitor	+2.2V@Po=+27dBm
	7. 800MHz VSWR Alarm	Over 4:1@Po=+20dBm
	8. 900MHz VSWR Alarm	Over 4:1@Po=+20dBm
	9. 800MHz Enable	TTL Low
	10. 900MHz Enable	TTL Low
	11. GND	
I/O Interface (LAB1143-04)	1. VCC	+27V
	2. GND	
	3. +7V	
	4. GND	



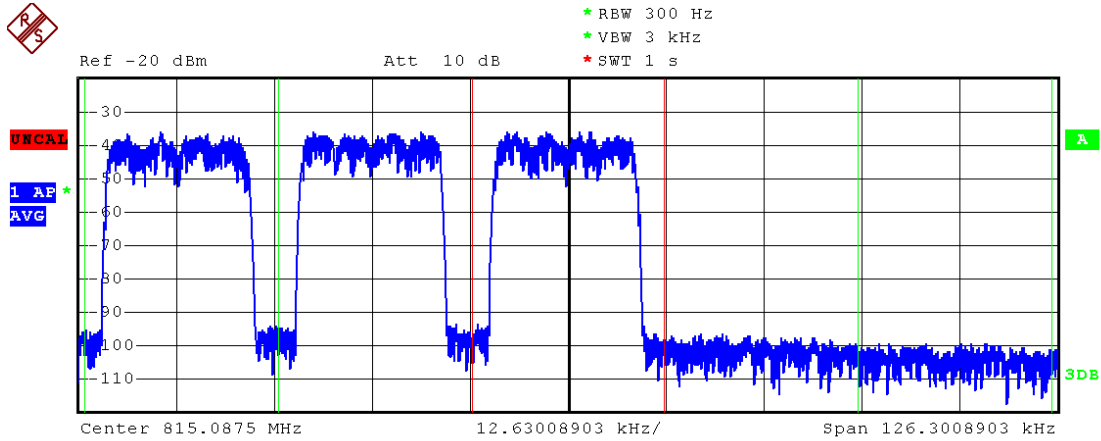
Electrical Test Data

800MHz Gain& VSWR

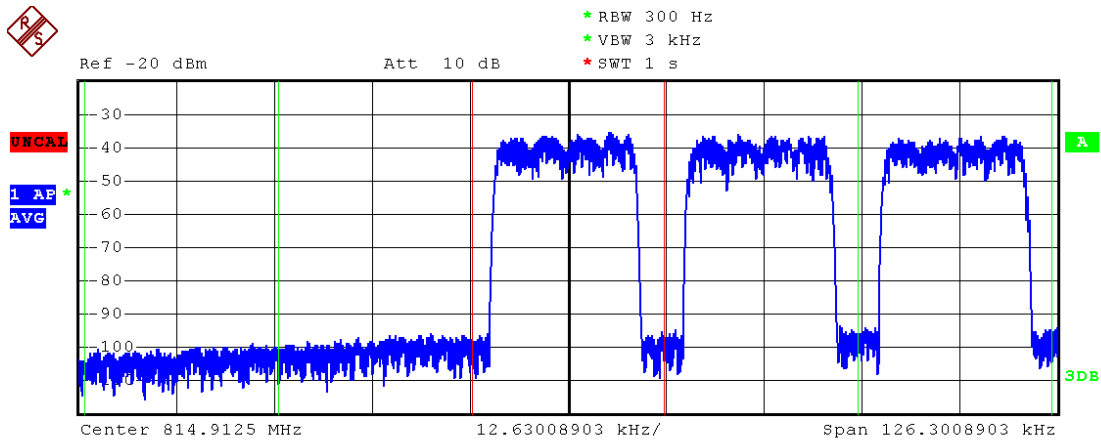




800MHz ACLR



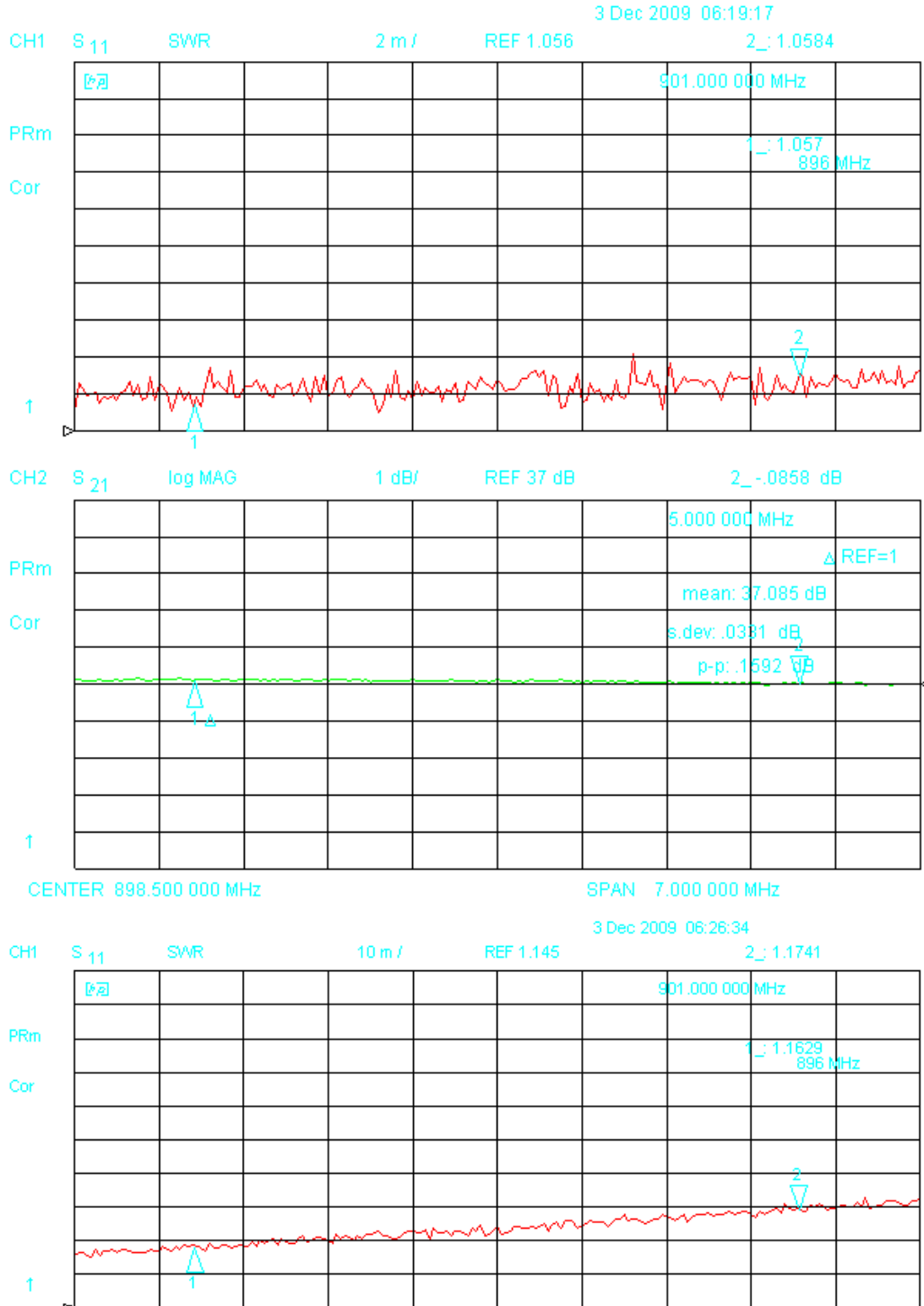
Tx Channel			
Bandwidth	25 kHz	Power	-22.91 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	0.34 dB
Spacing	25 kHz	Upper	-59.02 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.69 dB
Spacing	50 kHz	Upper	-61.45 dB



Tx Channel			
Bandwidth	25 kHz	Power	-22.57 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-58.94 dB
Spacing	25 kHz	Upper	-0.36 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-61.95 dB
Spacing	50 kHz	Upper	-0.73 dB

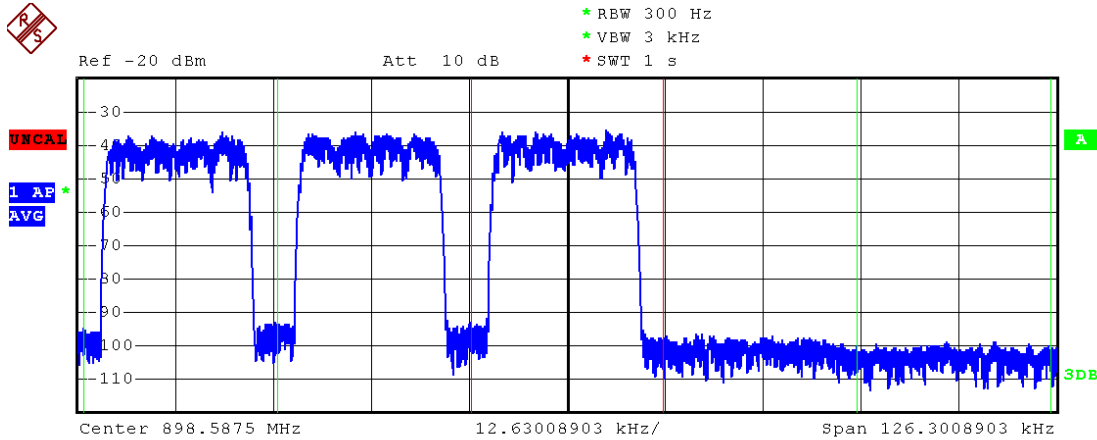


900MHz Gain & VSWR

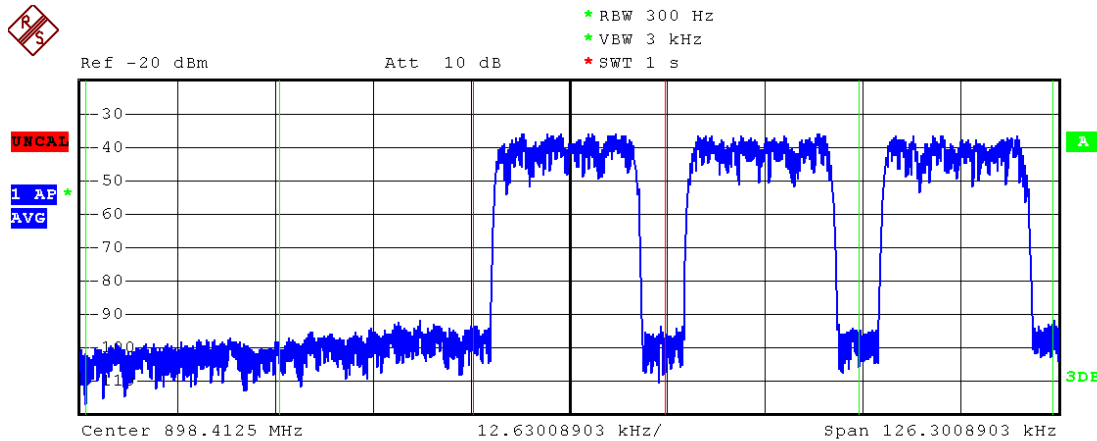




900MHz ACLR



Tx Channel			
Bandwidth	25 kHz	Power	-22.68 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-0.16 dB
Spacing	25 kHz	Upper	-59.14 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-1.10 dB
Spacing	50 kHz	Upper	-61.26 dB



Tx Channel			
Bandwidth	25 kHz	Power	-22.64 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-56.27 dB
Spacing	25 kHz	Upper	-0.17 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-60.23 dB
Spacing	50 kHz	Upper	-0.67 dB