

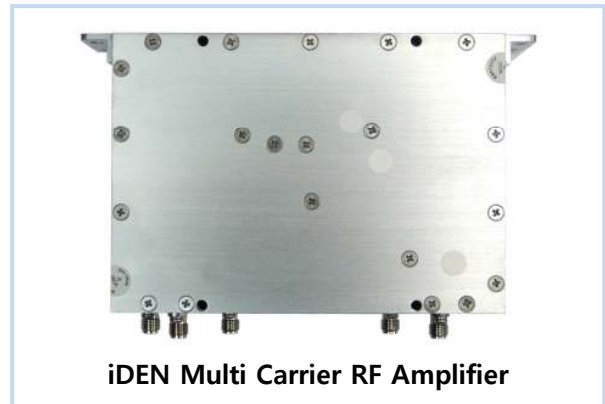
Product Features

- 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	+32dBm	
Gain	42dB±1dB	
Gain Flatness	0.5dB peak to peak	
Gain Variation Over Temp.	±1dB max.	
ACLR	±25kHz < -49dBc ±50kHz < -54dBc	iDEN 8 Carrier
Input VSWR	1.5:1 max	
Output VSWR	1.5:1 max	
DC Current Consumption	+7V 1.0A max +27V 2.5A max	
Enable	TTL Low	
Output Detect	+2.2V@Po=+32dBm	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

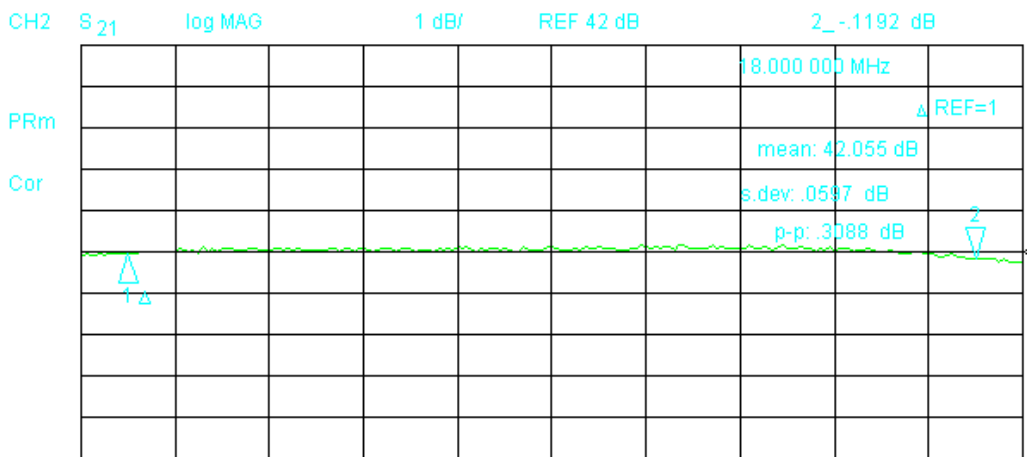
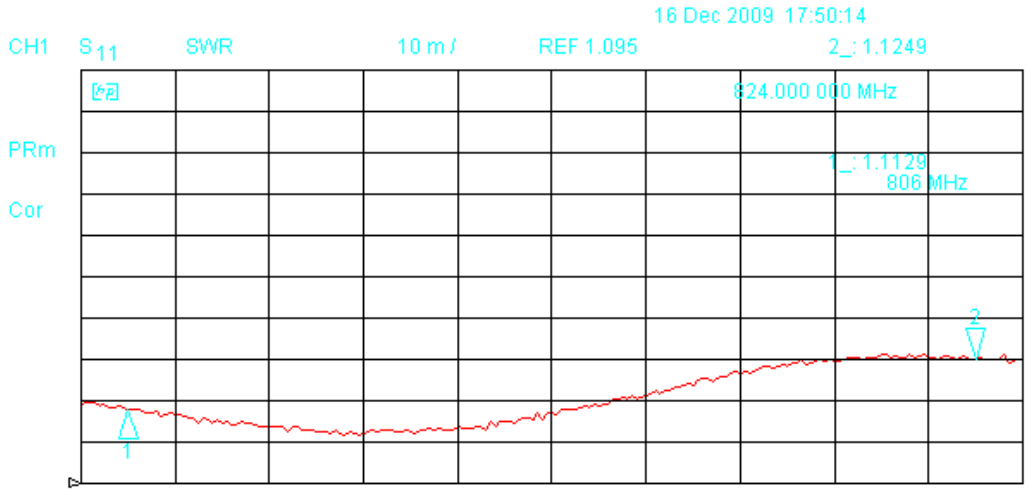
Pin Assignment

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=+32dBm
	6. 900MHz Power Monitor	+2.2V@Po=+32dBm
	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	



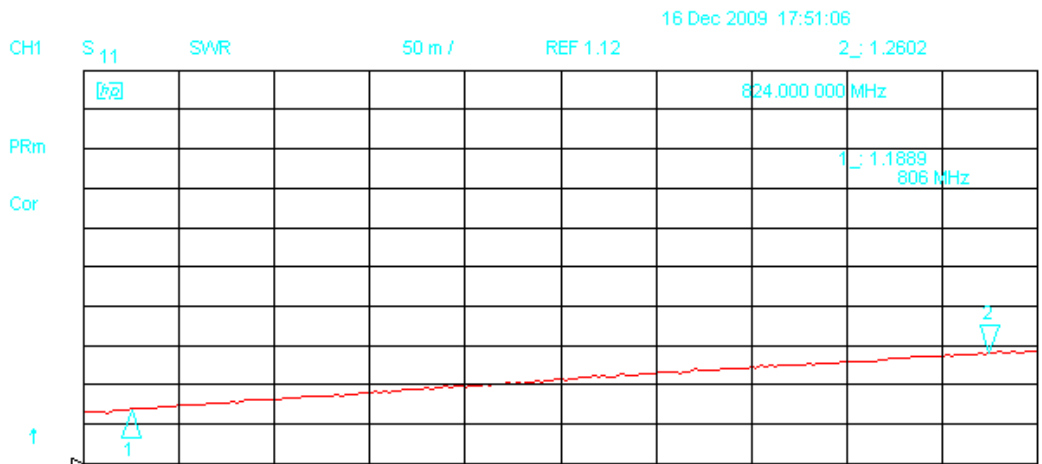
Electrical Test Data

800MHz Gain & VSWR



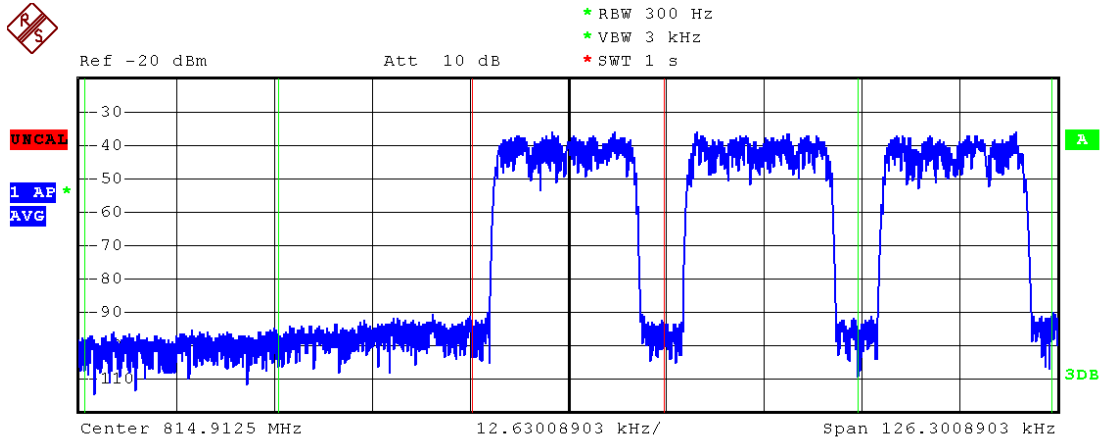
CENTER 815.000 000 MHz

SPAN 20.000 000 MHz

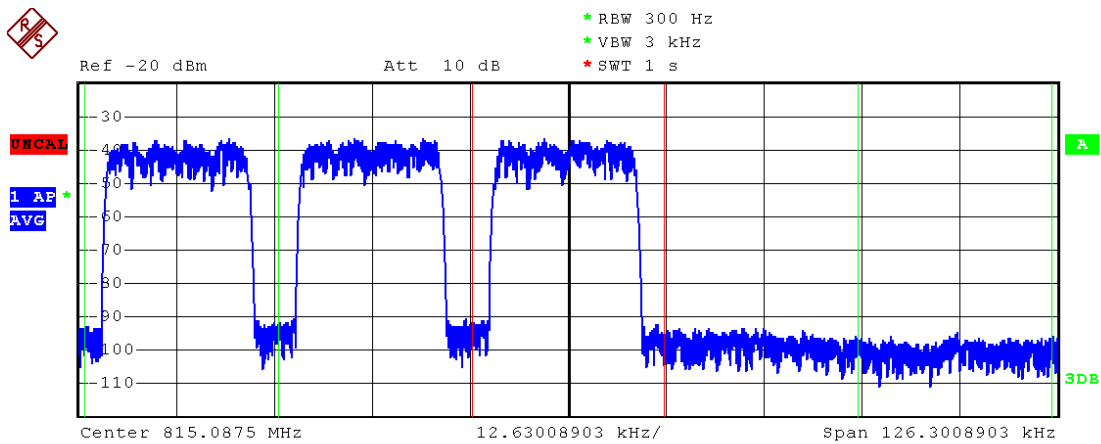




800MHz ACLR



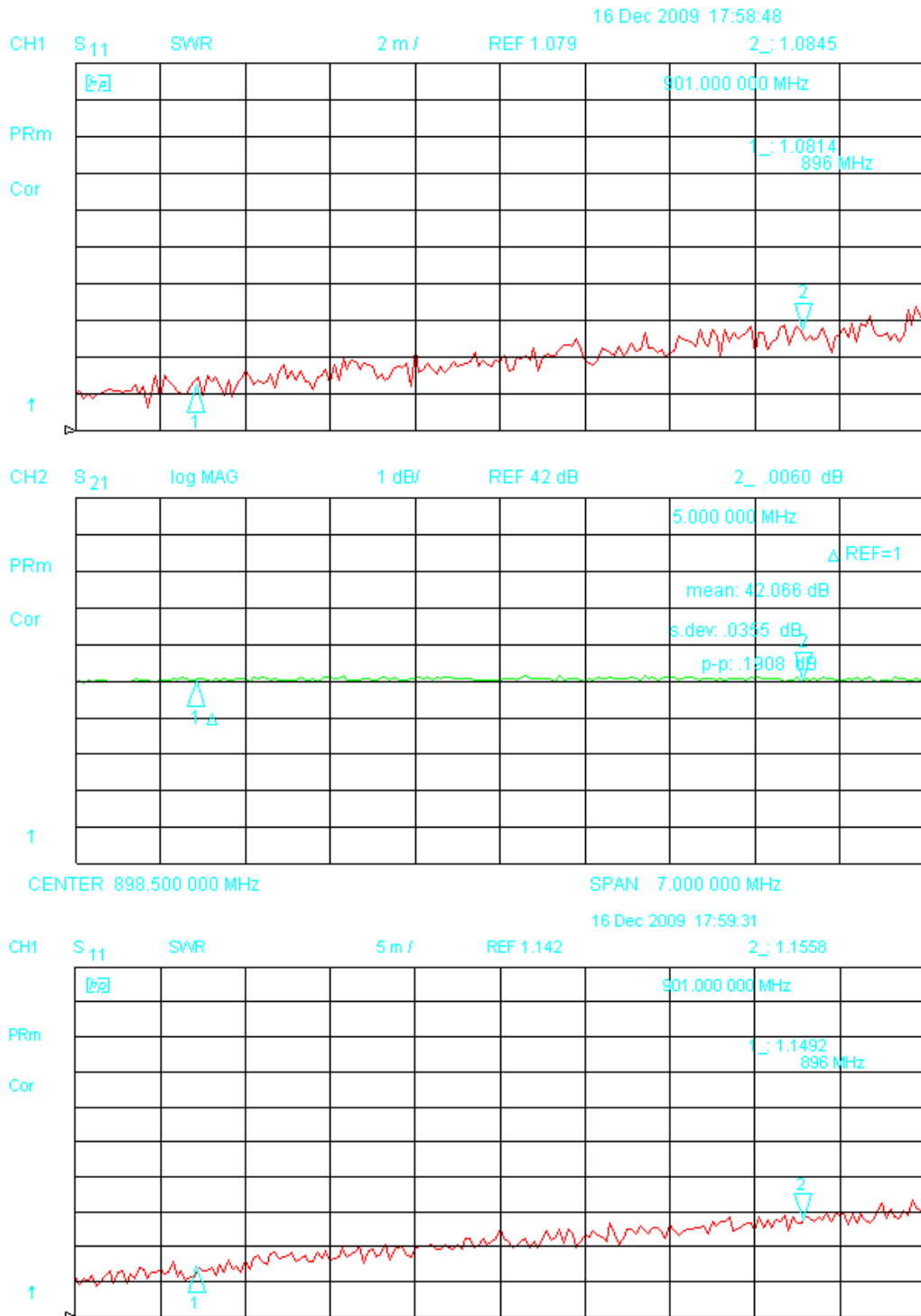
Tx Channel			
Bandwidth	25 kHz	Power	-23.27 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-53.84 dB
Spacing	25 kHz	Upper	0.05 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-57.17 dB
Spacing	50 kHz	Upper	-0.37 dB



Tx Channel			
Bandwidth	25 kHz	Power	-23.29 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	0.08 dB
Spacing	25 kHz	Upper	-55.38 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.53 dB
Spacing	50 kHz	Upper	-57.49 dB

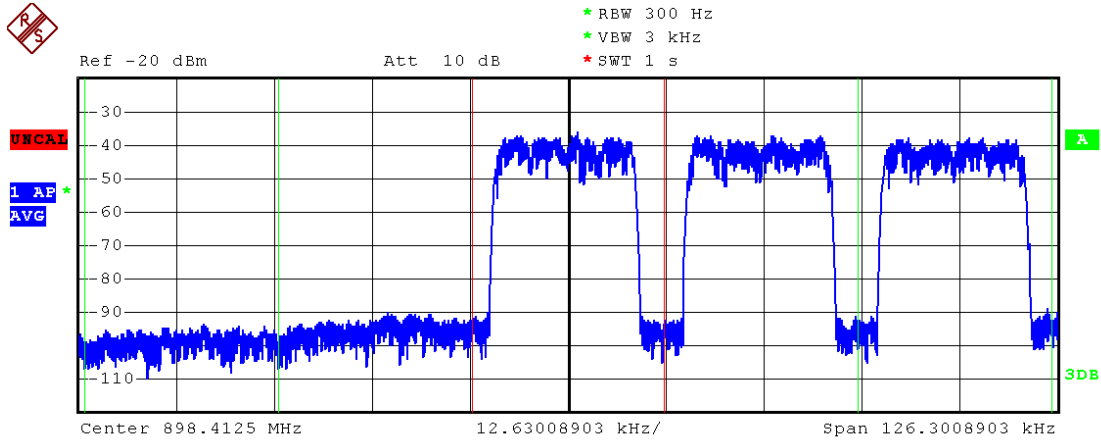


900MHz Gain & VSWR

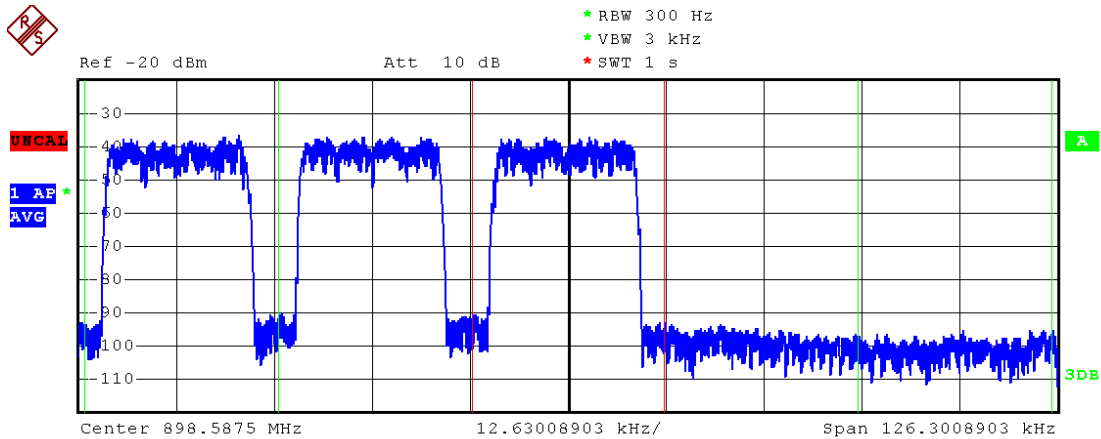




900MHz ACLR



Tx Channel			
Bandwidth	25 kHz	Power	-23.52 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-52.51 dB
Spacing	25 kHz	Upper	-0.36 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-55.76 dB
Spacing	50 kHz	Upper	-0.85 dB



Tx Channel			
Bandwidth	25 kHz	Power	-23.88 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	0.32 dB
Spacing	25 kHz	Upper	-55.46 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.30 dB
Spacing	50 kHz	Upper	-57.38 dB