

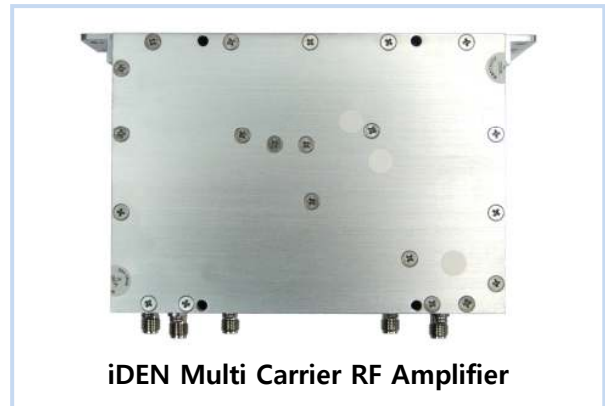
Product Features

- 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	+17dBm	
Gain	27dB±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	+1.8V@Po=+17dBm	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

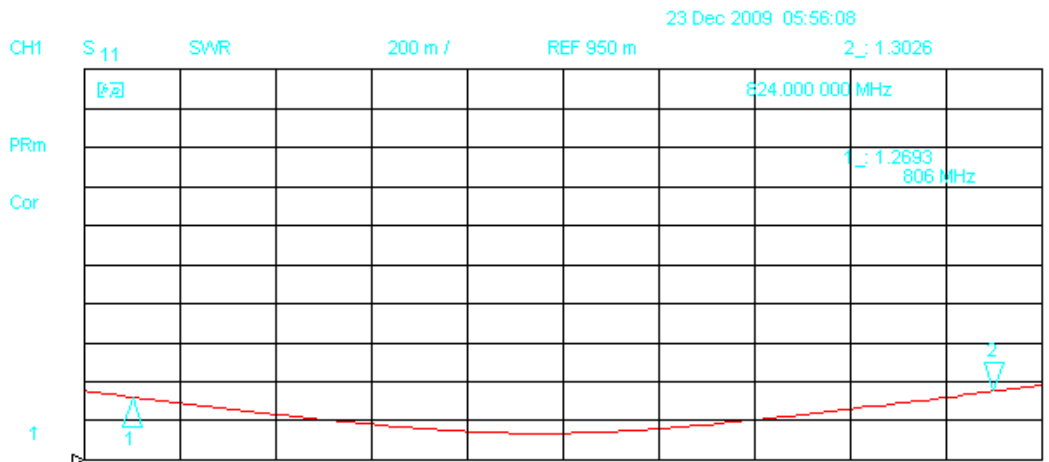
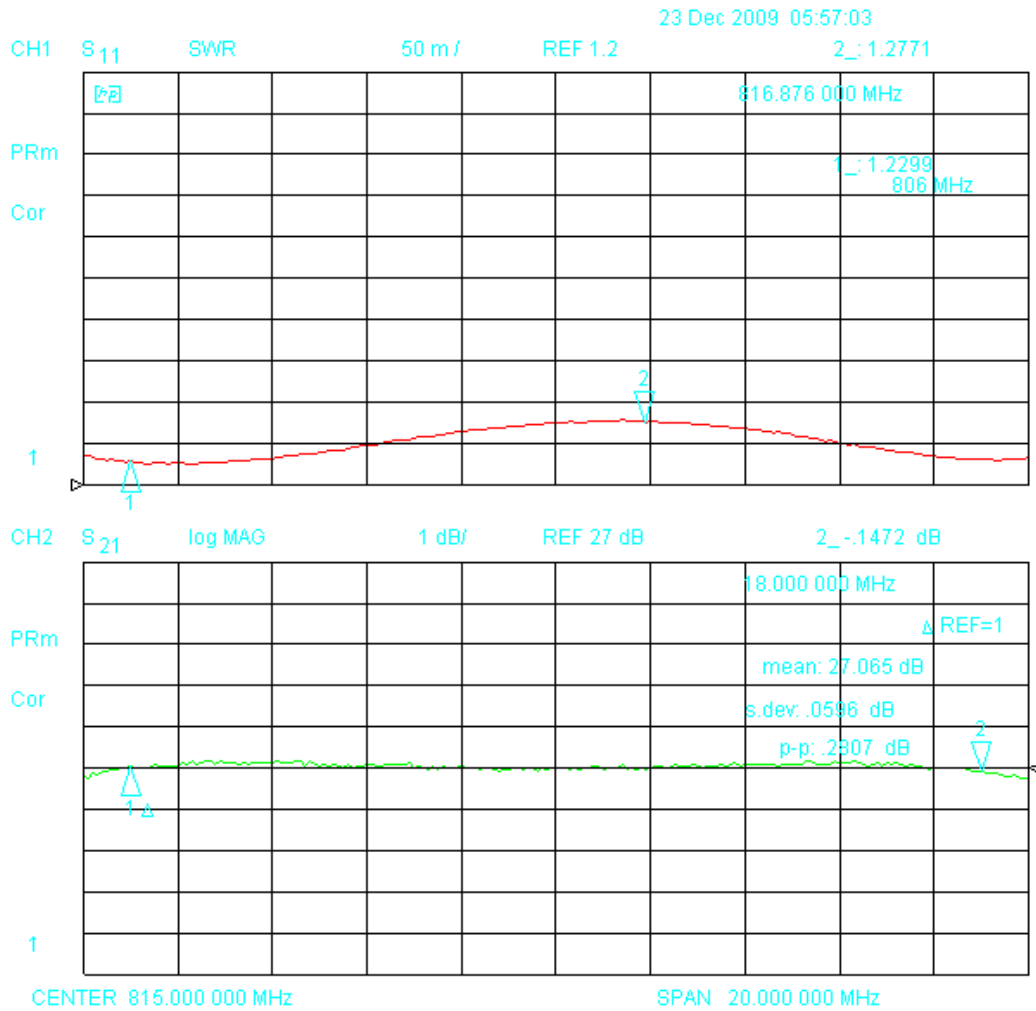
Pin Assignment

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	+1.8V@Po=+17dBm
	6. 900MHz Power Monitor	+1.8V@Po=+17dBm
	7. 800MHz VSWR Alarm	Over 4:1@Po=+12dBm
	8. 900MHz VSWR Alarm	Over 4:1@Po=+12dBm
	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	



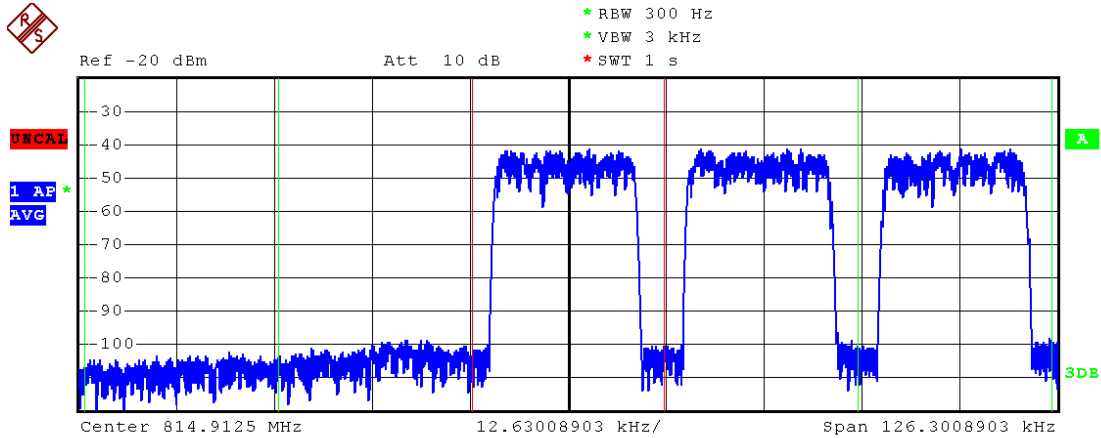
Electrical Test Data

800MHz Gain& VSWR

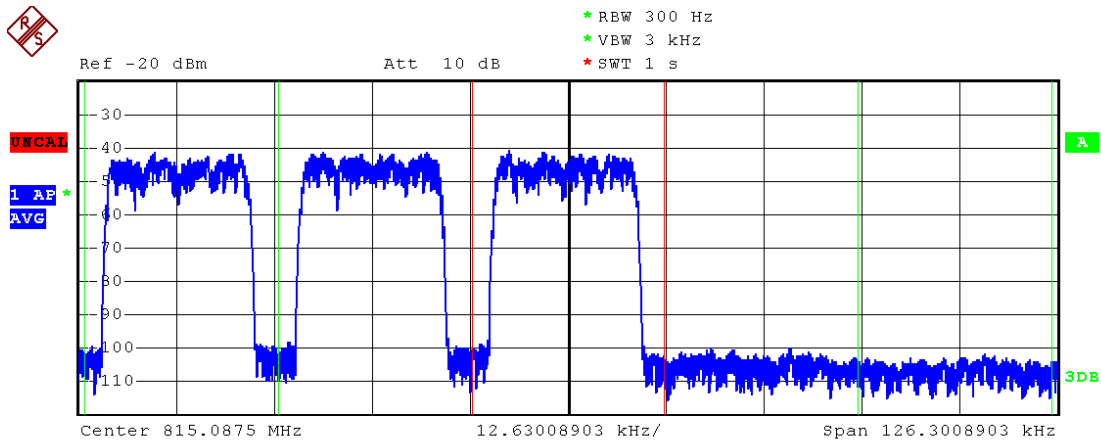




800MHz ACLR



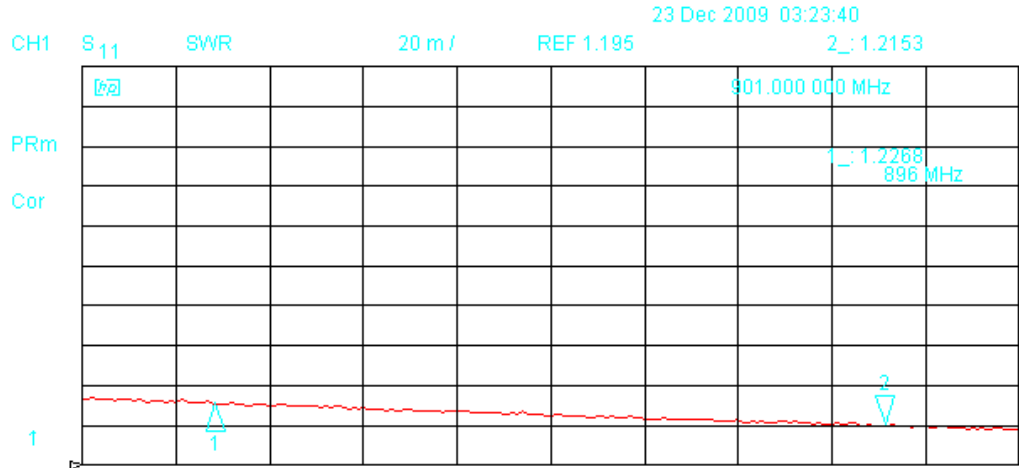
Tx Channel			
Bandwidth	25 kHz	Power	-28.08 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-56.77 dB
Spacing	25 kHz	Upper	-0.01 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-60.34 dB
Spacing	50 kHz	Upper	-0.33 dB



Tx Channel			
Bandwidth	25 kHz	Power	-28.11 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	0.06 dB
Spacing	25 kHz	Upper	-57.63 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.49 dB
Spacing	50 kHz	Upper	-59.15 dB

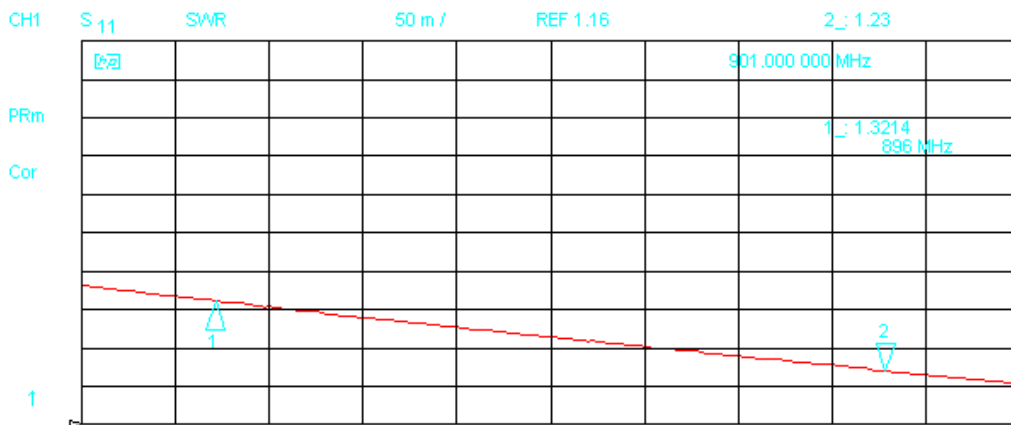


900MHz Gain & VSWR



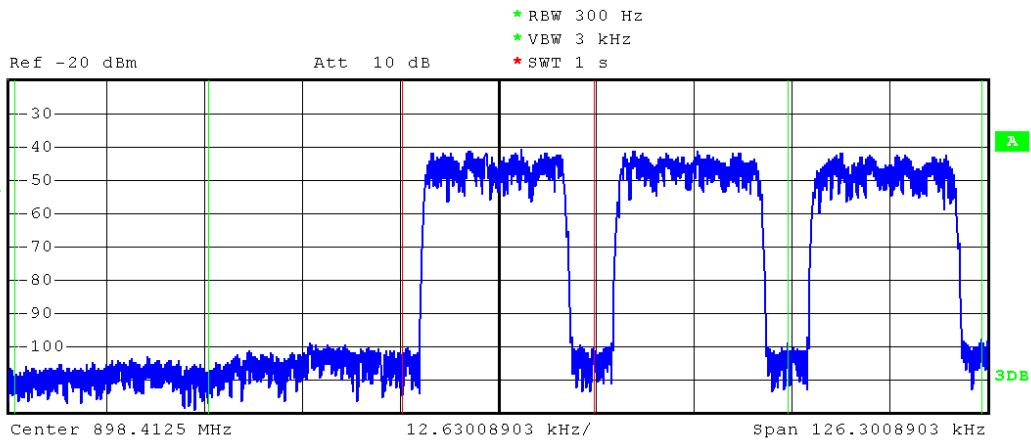
CENTER 898.500 000 MHz SPAN 7.000 000 MHz

23 Dec 2009 02:30:25

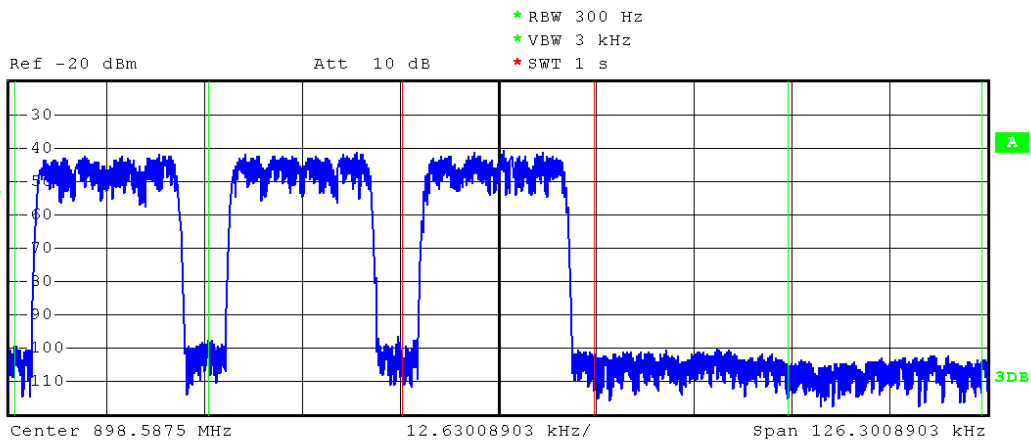




900MHz ACLR



Tx Channel			
Bandwidth	25 kHz	Power	-28.06 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-57.09 dB
Spacing	25 kHz	Upper	-0.08 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-60.87 dB
Spacing	50 kHz	Upper	-1.15 dB



Tx Channel			
Bandwidth	25 kHz	Power	-28.17 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-0.06 dB
Spacing	25 kHz	Upper	-57.37 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.71 dB
Spacing	50 kHz	Upper	-59.30 dB