

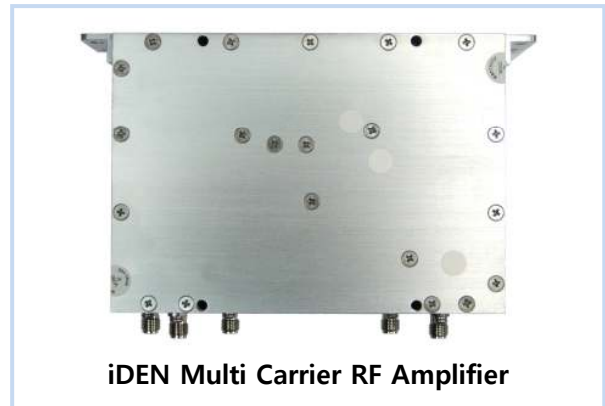
## Product Features

- 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
<b>Frequency Range</b>	DL800 851~869MHz DL900 935~940MHz	
<b>Output Power</b>	+32dBm	
<b>Gain</b>	42dB±1dB	
<b>Gain Flatness</b>	0.5dB peak to peak	
<b>Gain Variation Over Temp.</b>	±1dB max.	
<b>ACLR</b>	±25kHz < -49dBc ±50kHz < -54dBc	iDEN 8 Carrier
<b>Input VSWR</b>	1.5:1 max	
<b>Output VSWR</b>	1.5:1 max	
<b>DC Current Consumption</b>	+7V 1.0A max +27V 2.5A max	
<b>Enable</b>	TTL Low	
<b>Output Detect</b>	+2.2V@Po=+32dBm	0.05V/dB
<b>Couple Port</b>	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

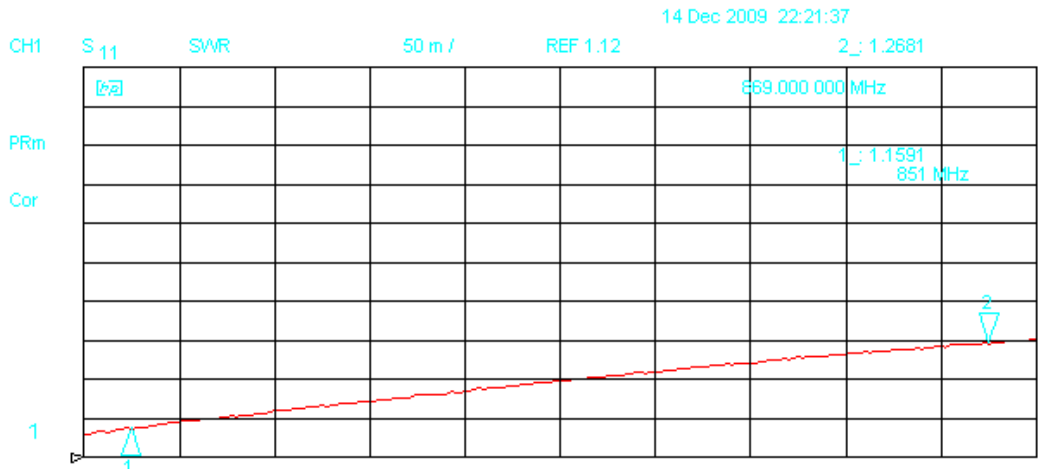
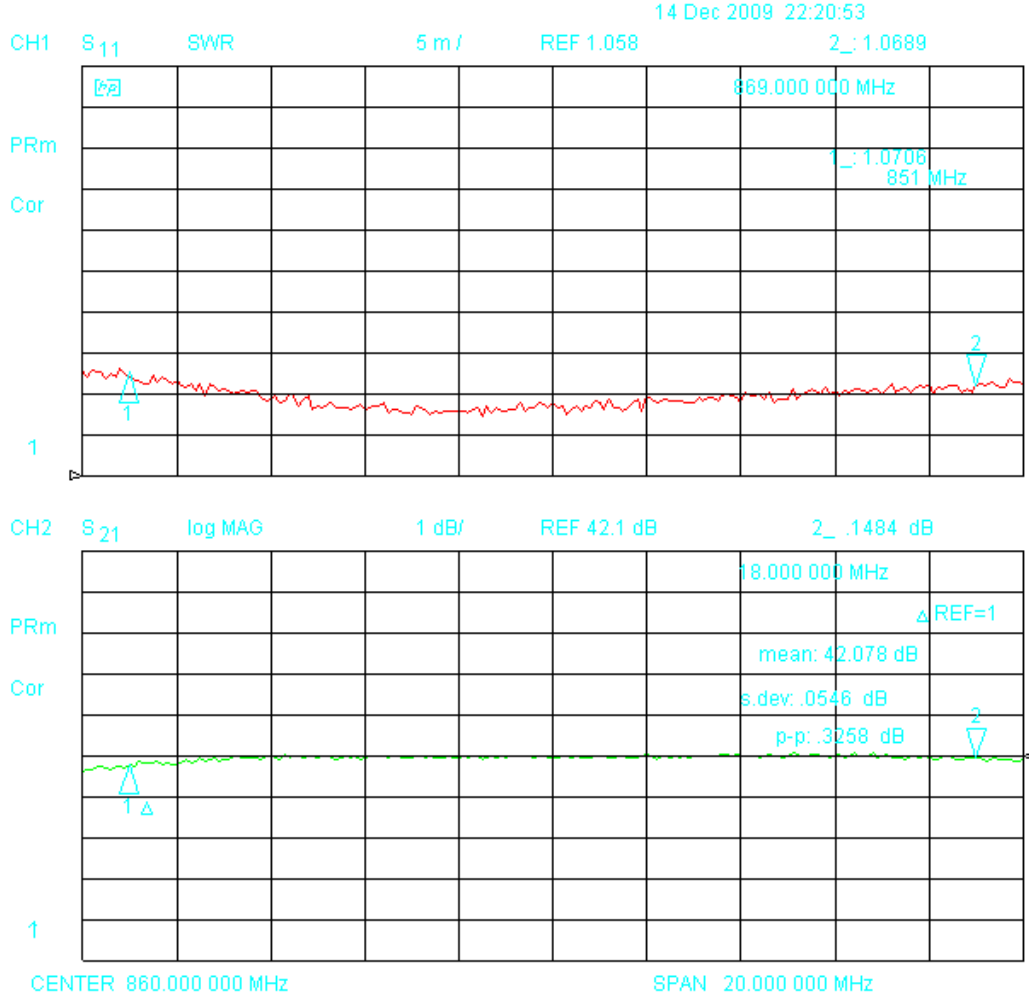
### Pin Assignment

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	



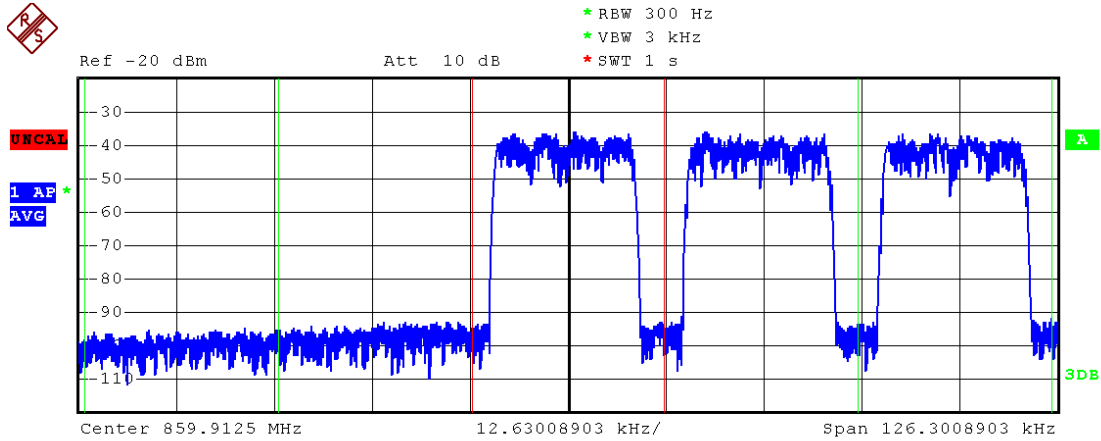
Electrical Test Data

800MHz Gain & VSWR

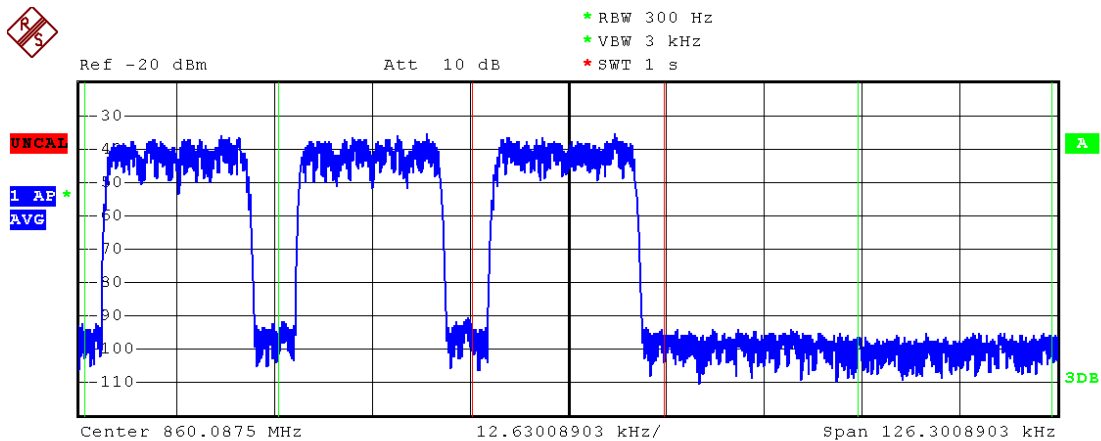




800MHz ACLR



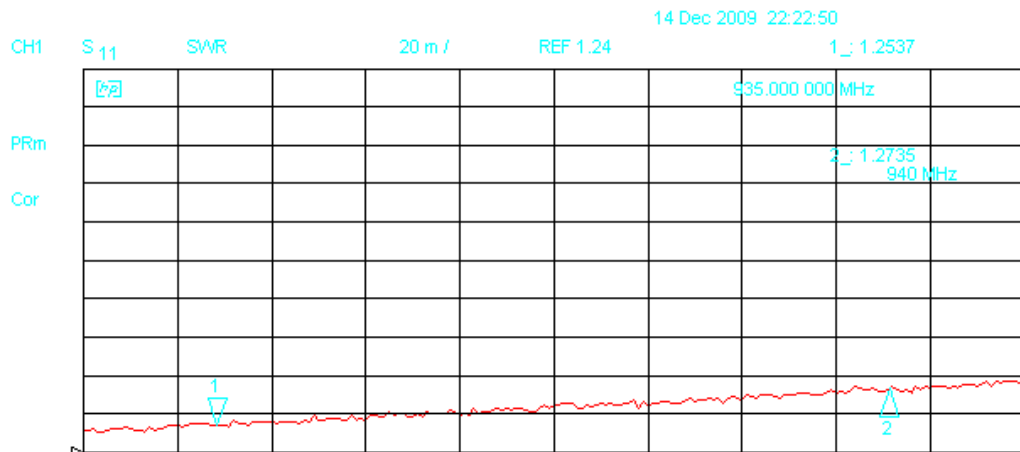
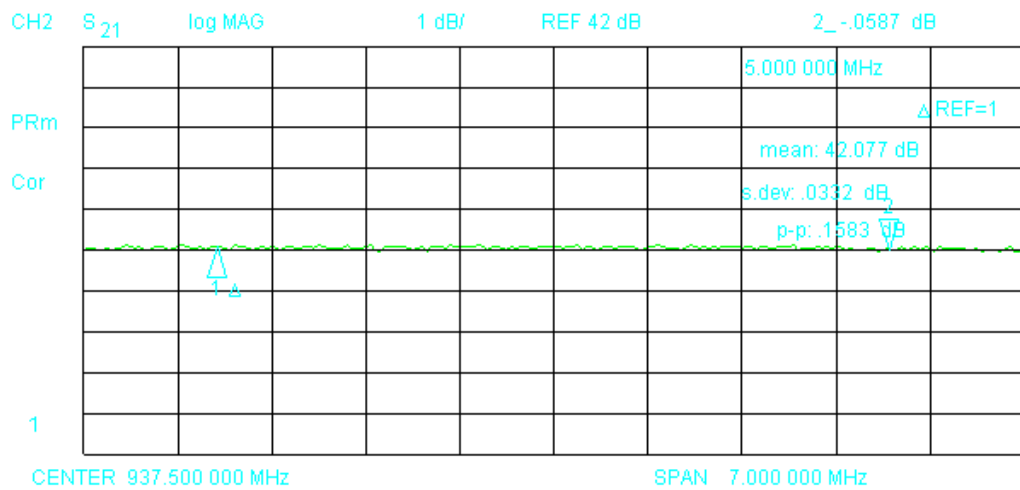
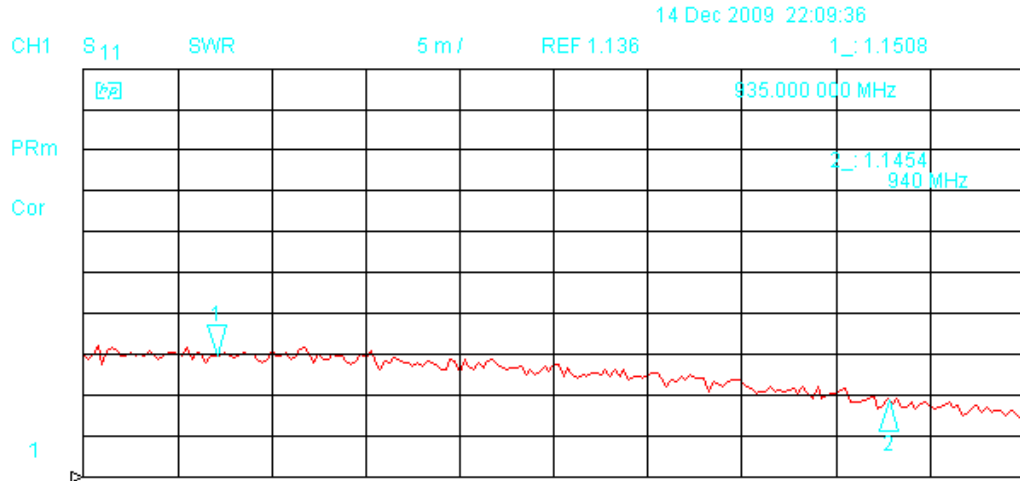
Tx Channel			
Bandwidth	25 kHz	Power	-23.01 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-54.96 dB
Spacing	25 kHz	Upper	-0.30 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-57.18 dB
Spacing	50 kHz	Upper	-0.55 dB



Tx Channel			
Bandwidth	25 kHz	Power	-23.14 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-0.10 dB
Spacing	25 kHz	Upper	-55.97 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.33 dB
Spacing	50 kHz	Upper	-57.09 dB

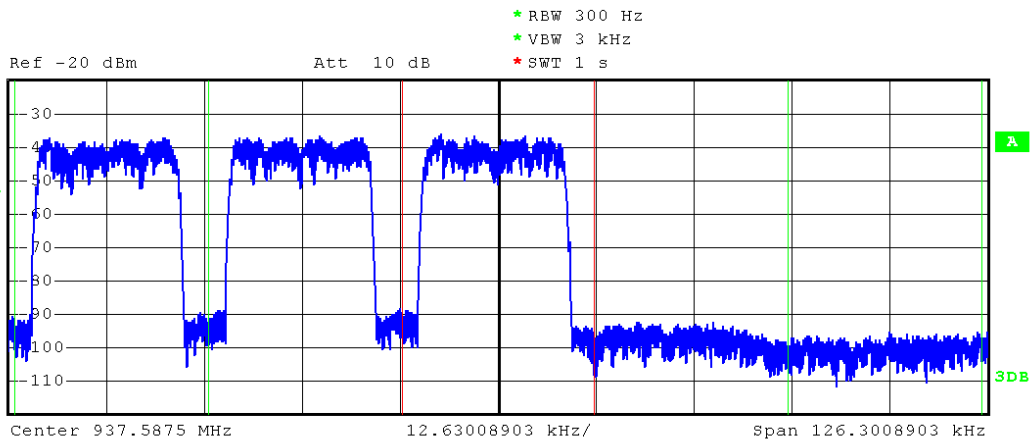


900MHz Gain& VSWR

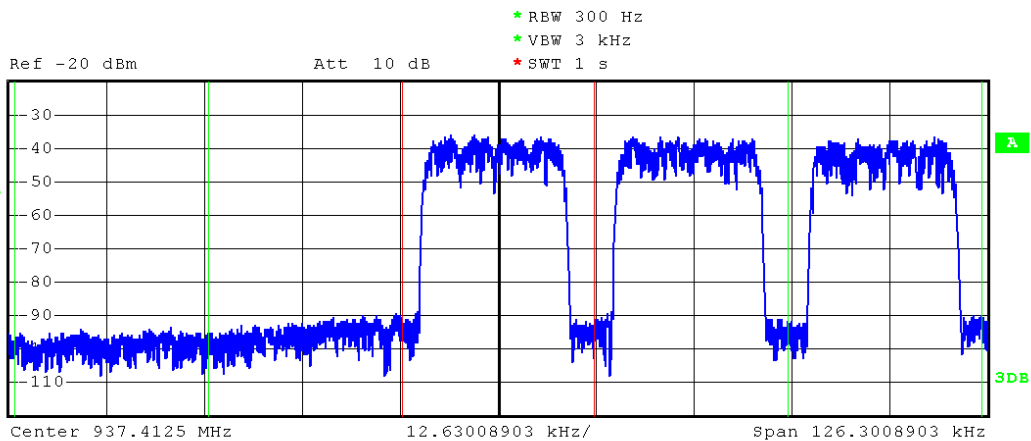




900MHz ACLR



Tx Channel			
Bandwidth	25 kHz	Power	-23.24 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	0.02 dB
Spacing	25 kHz	Upper	-54.64 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-0.66 dB
Spacing	50 kHz	Upper	-57.45 dB



Tx Channel			
Bandwidth	25 kHz	Power	-23.05 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-52.93 dB
Spacing	25 kHz	Upper	-0.22 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-56.16 dB
Spacing	50 kHz	Upper	-0.77 dB