

Product Features

- MCPA Design for SMR900, PS900, GSM-R, GSM-L, GSM-H, Paging, TETRA Amplifier
- Excellent Suppression IMD
- High linearity and high efficiency
- Suitable for Analog & Digital Modulation
- Feed - Forward Technology Amplifier[FFTA]
- Professional Multi Carrier GSM900 RF Amplifier

Application

- TETRA & EGSM900 Repeater, Booster, BDA



1. Electrical Specification.

Parameter	Specification	Remark
Frequency Range	920MHz~960MHz	40MHz BW
Output Power	40dBm(10W)	ALC 41dBm : Min 10dB
Gain	50dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20°C~+60°C
IMD	< -73dBc	CW 2 tone, Ch Sp. : 100KHz
Harmonic	-40dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+27V	
DC Current Consumption	4.0A max.	@40dBm
Shut-down Temp Level	90±5°C	70±5°C Auto Enable

2. Environmental Specification

Parameter	Specification	Remark
Operating Temperature	-20°C~+60°C	
Storage Temperature	-40°C~+85°C	
Relative Humidity	0%~90%	Non-condensing



3. Mechanical Specification.

Physical Dimension : 155mm X 185mm X 35mm

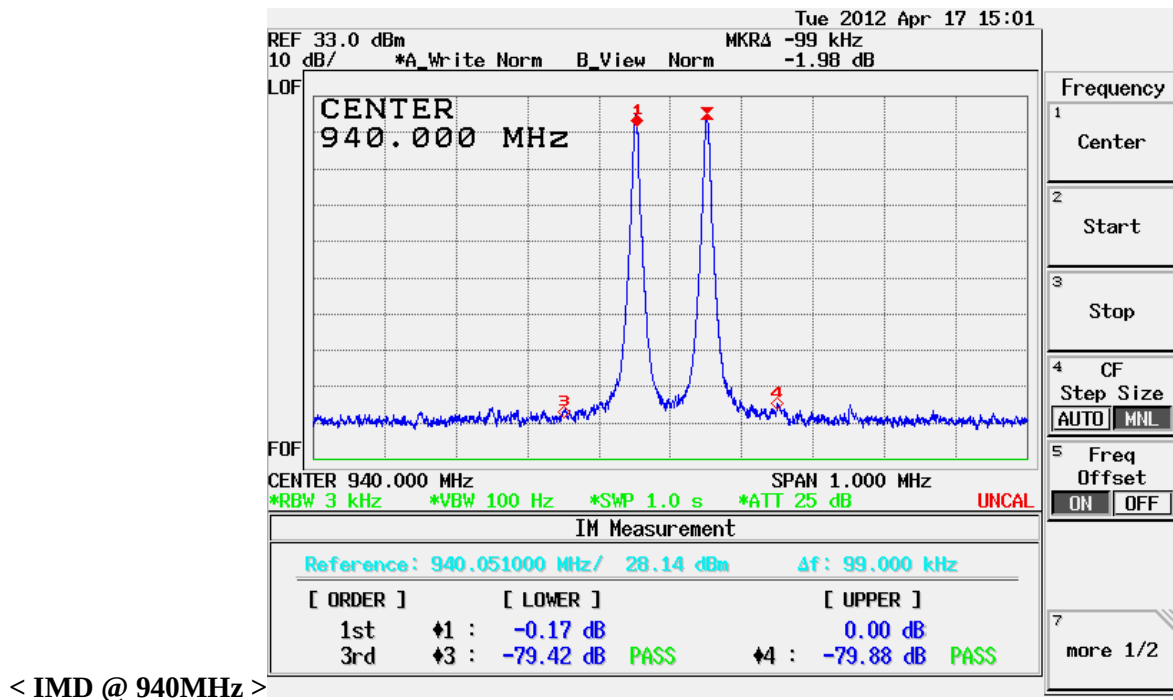
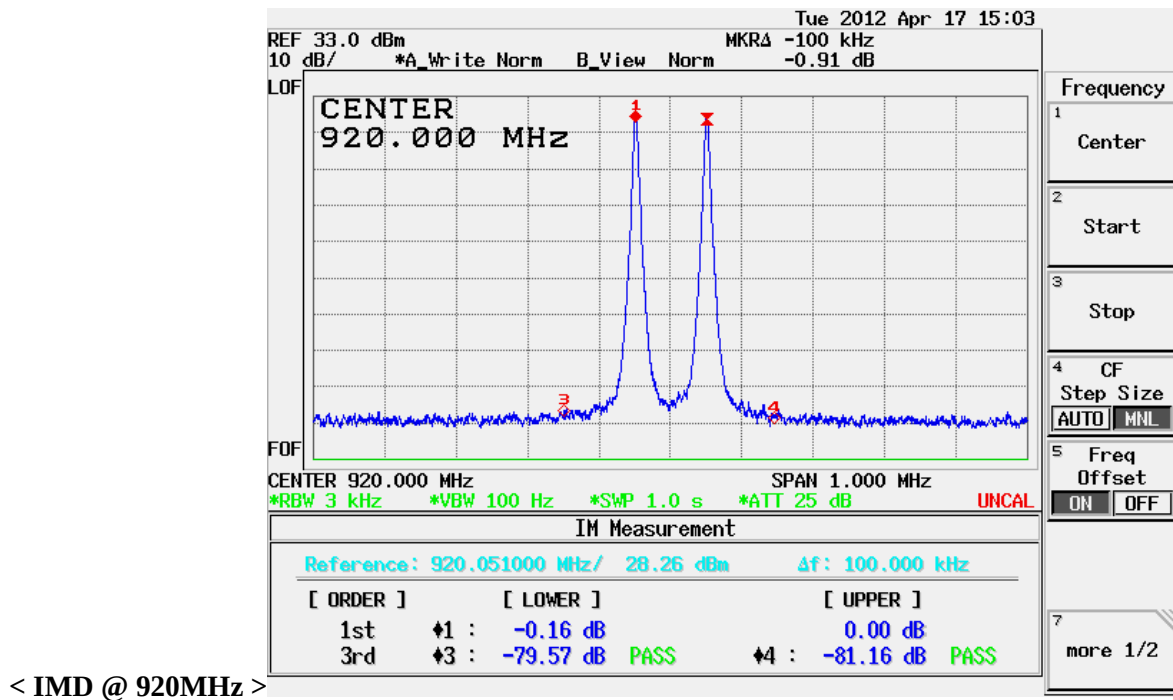
4. Pin Assignment

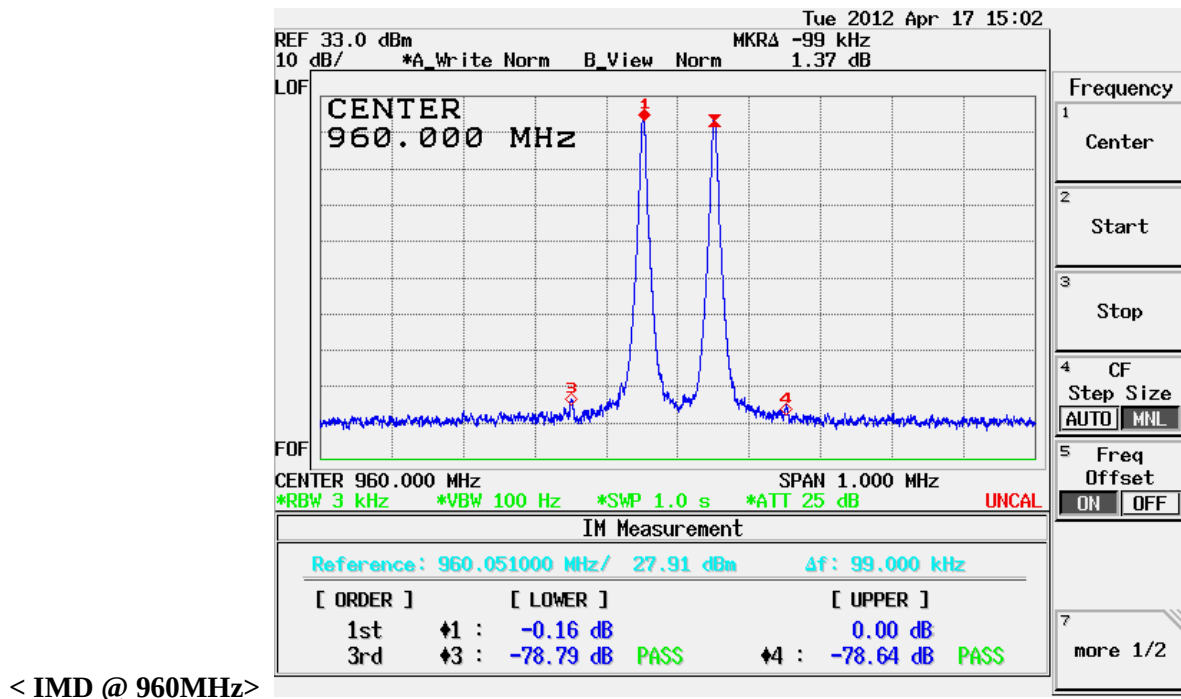
I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+42dBm±1dB Shutdown High
		High (shut-down) Low (Normal)
	2. High Temp. Alarm	Alarm & Shutdown +90°C↑ Auto Recovery +70°C↓
	3. VSWR Alarm	High (Alarm) Low (Normal) 30dBm(Output Open)
	4. Temp. Monitor	Vo=(T / 100)+500mV
	5. LPA Status	High (Inactive), Low (Active)
	6. Loop Fail Alarm	High (shut-down) Low (Normal)
	7. FWD Power Monitor	4.0V@Po=+40dBm, 0.1V/dB
	8. Enable/Disable	High (Disable) Open & Low (Enable)
	9. GND	
	DC Fail Alarm	≤19V ~ 31V≤ : Shut down 21V ~ 29V : Auto Recovery
I/O Interface (3W3P Male)	A1. VCC	+27V
	A2. GND	
	A3. N.C	

5. Electrical Test Data

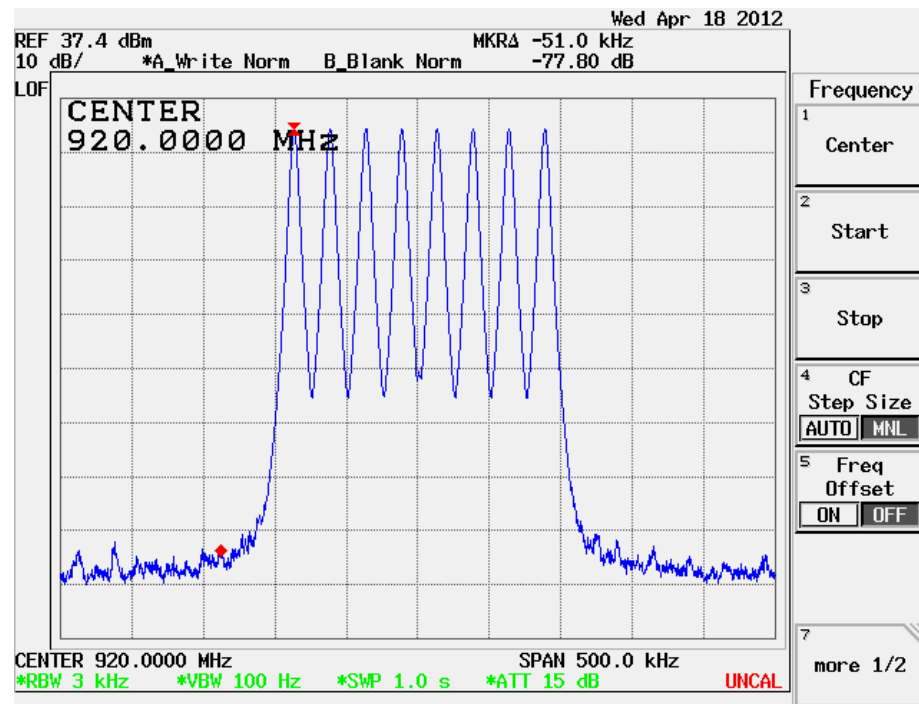
5.1 IMD @Po=+40dBm(CW 2 Tone, 100KHz Spacing) / DC 27V, 3A

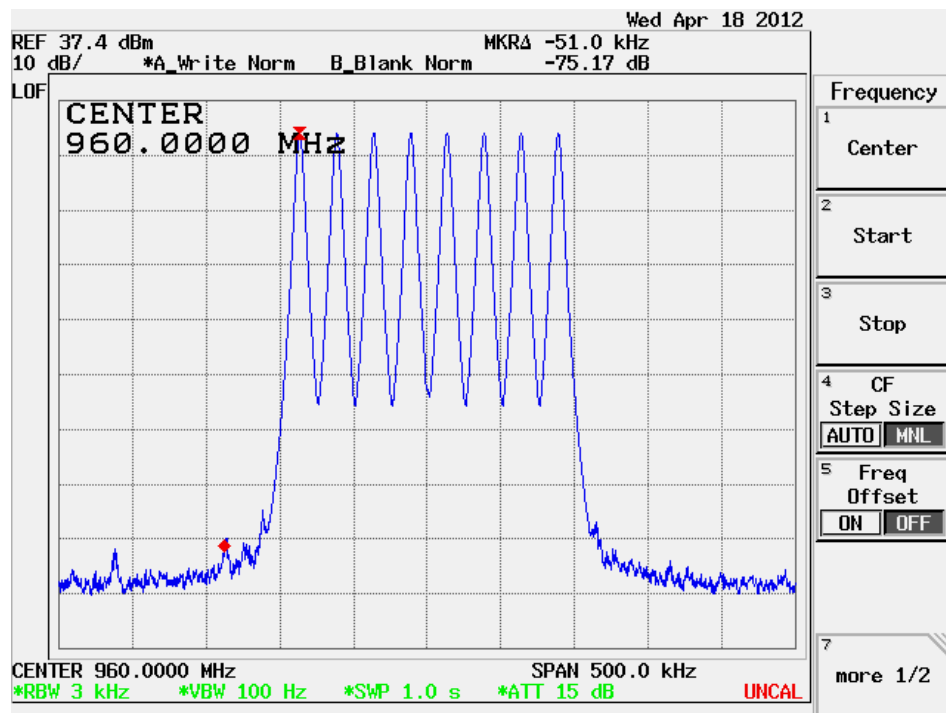
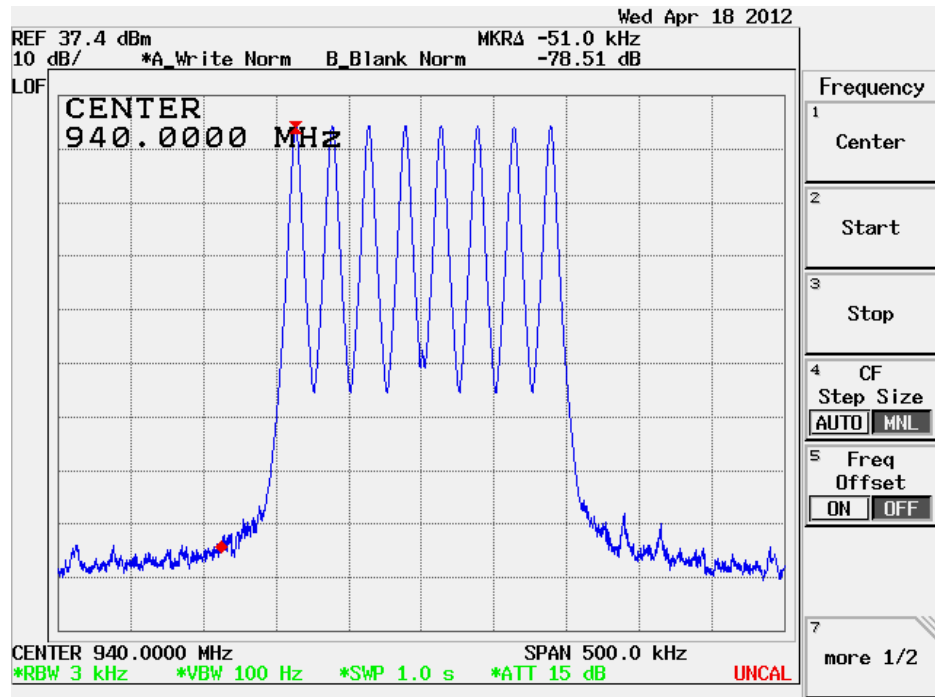
■ Spectrum Analyzer Data

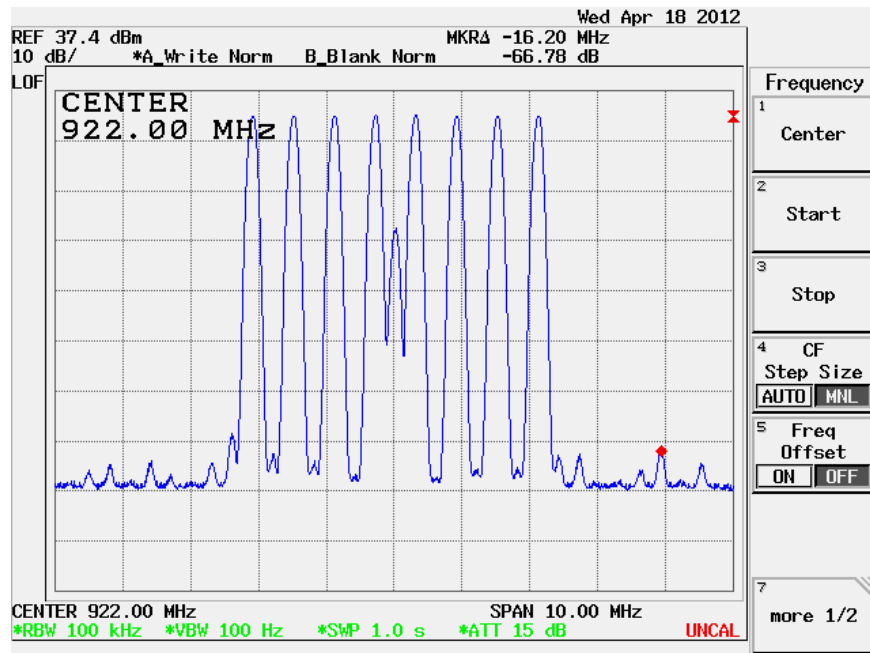




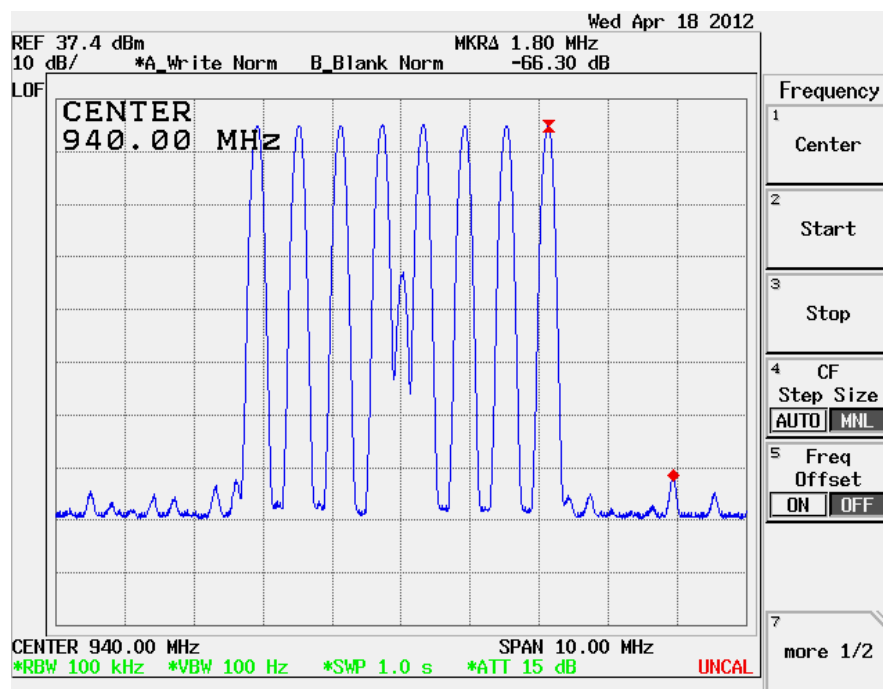
5.2 IMD @Po=+40dBm(CW 8 Tone, 25KHz Spacing)

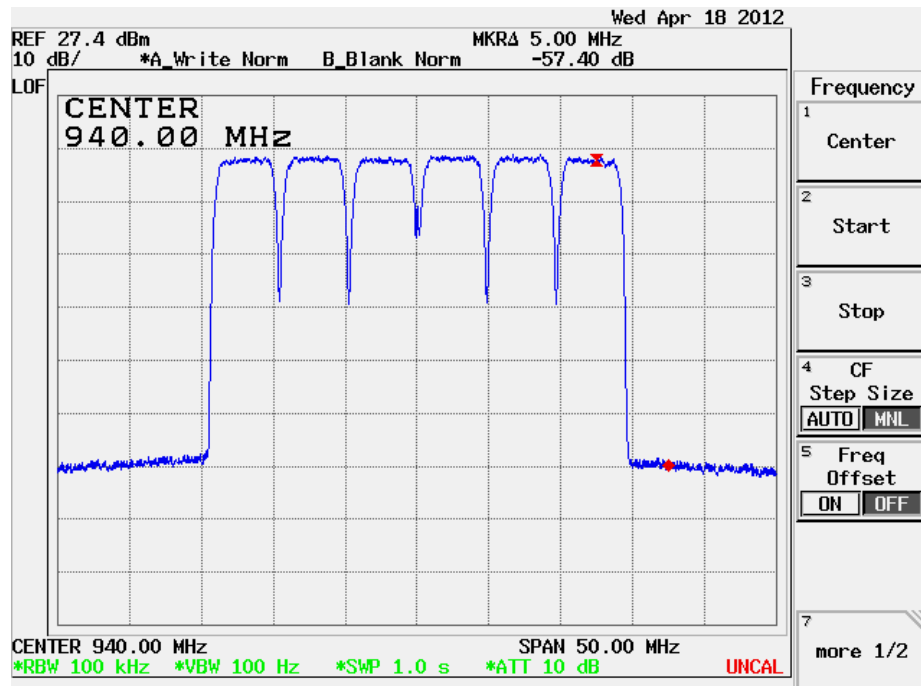
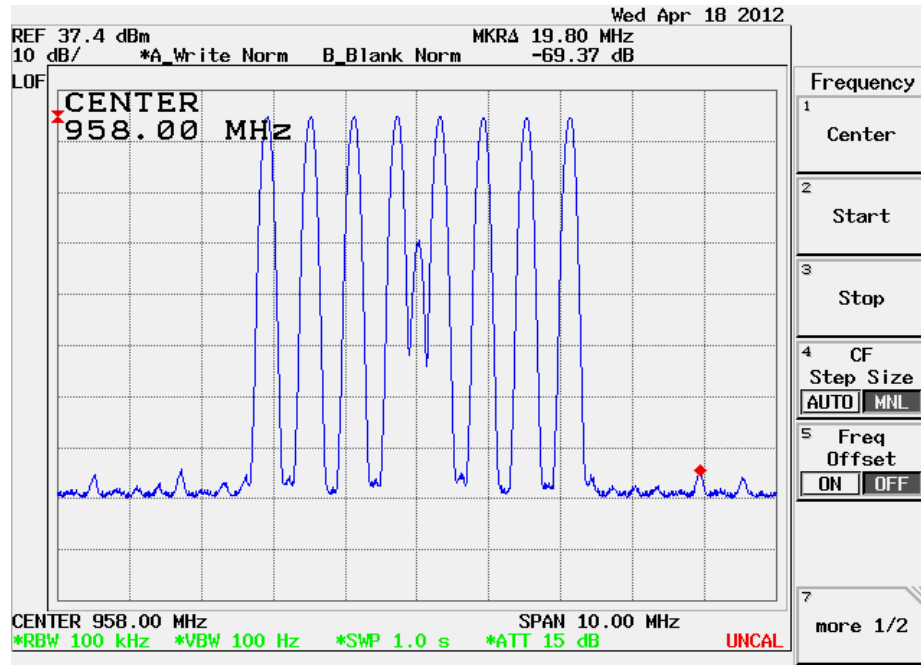






5.3 IMD @Po=+40dBm(CW 8 Tone, 600KHz Spacing)



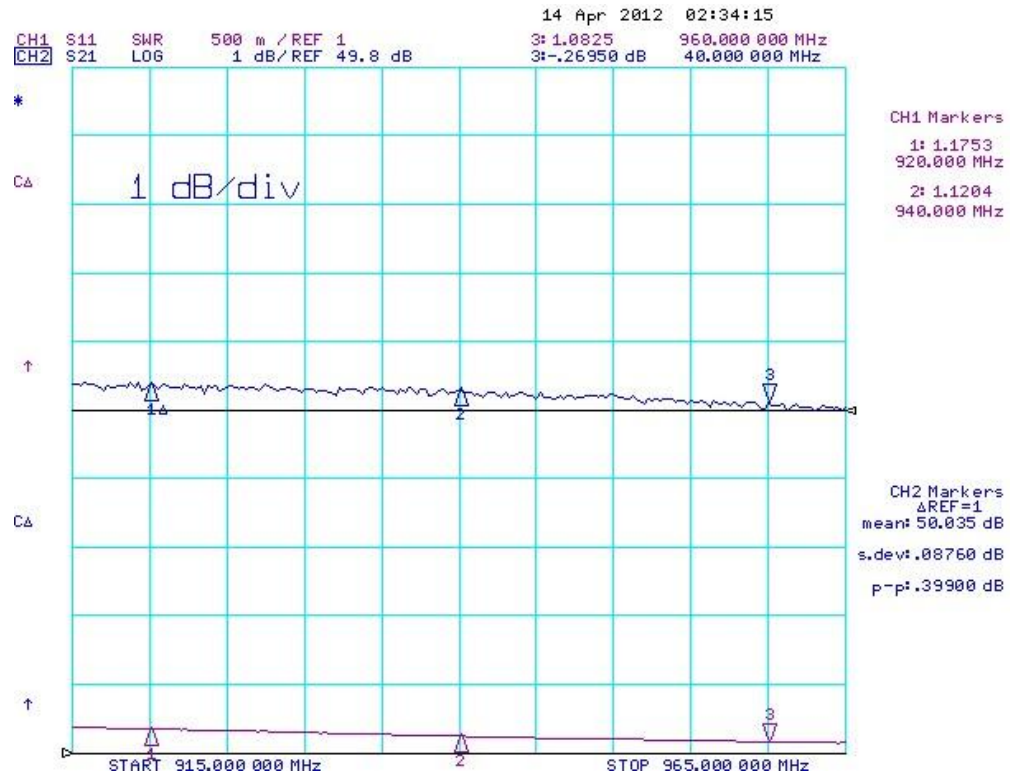


<6 UMTS Signal Test>

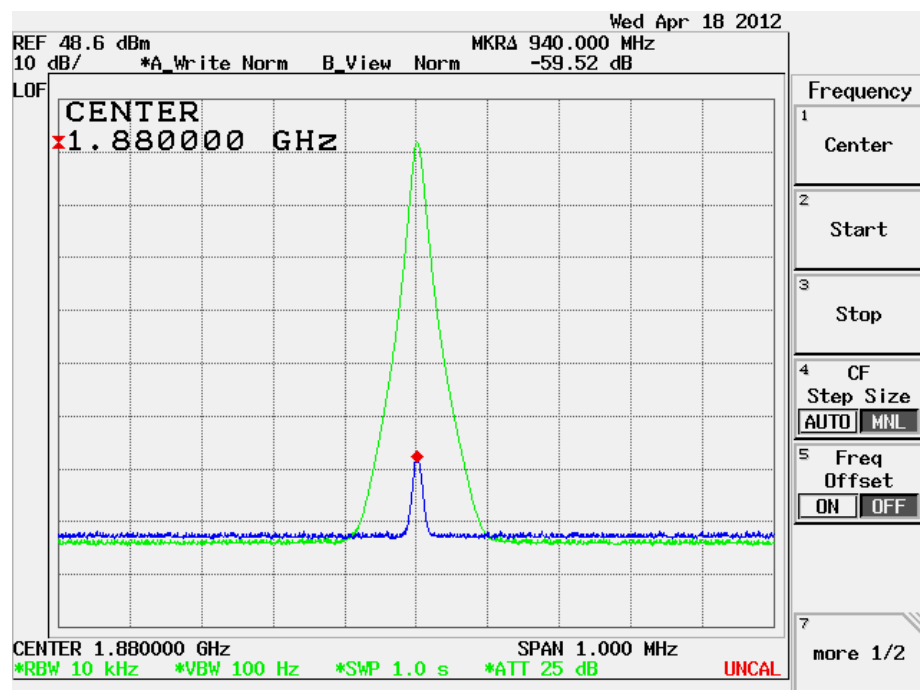


■ Network Analyzer Data

< S11 & Gain, Gain Flatness >



< 2nd Harmonics @ 940MHz >



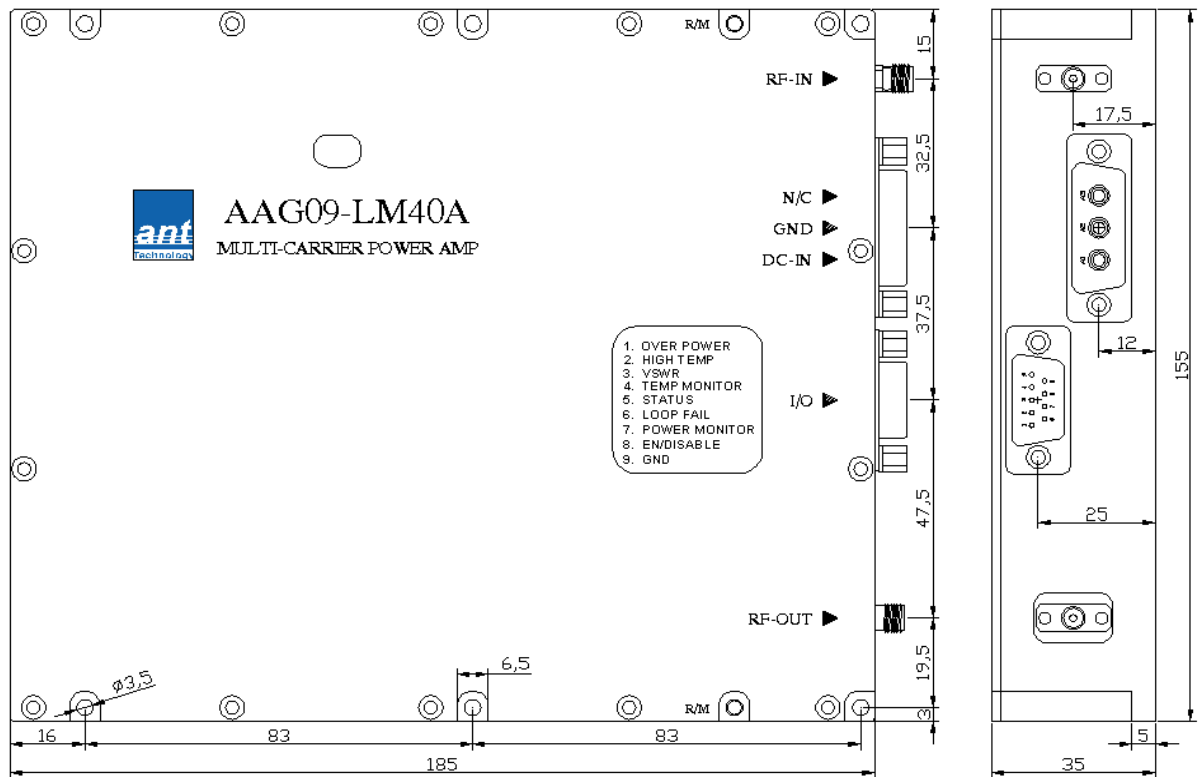


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AAT09-LM40A-F1

6. Outline Drawing



7. Photo

