



Product Features

- [USPCS1900 MCPA] Multi carrier RF amplifier
- Excellent Suppression IMD
- High linearity and high efficiency
- Suitable for Analog & Digital Modulation
- Feed - Forward Technology Amplifier[FFTA]

Application

- USPCS1900 Repeater & Booster, DAS Amplifier

1. Electrical Specification.



USPCS1900 / GSM1900 MCPA
UMTS(WCDMA) U.L RF Amplifier

Parameter	Specification	Remark
Frequency Range	1930MHz~1995MHz	65MHz BW
Output Power	3.5W	
Gain	41dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20°C~+60°C
IMD	< -60dBc	CW 10 tone
Harmonic	-45dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+28V	
DC Current Consumption	2.0A max.	@3.5W
Output protection	Isolator	
Shut-down Temp Level	85±5°C	65±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 & Weight

Physical Dimension : 130mm X 120mm X 25mm, 640g

4. Pin Assignment

I/O Interface (D-Sub 9Pin Male)	1.	+28V_IN	
	2.	GND	
	3.	En/Disable Control	High & Open(Disable) Low (Enable)
	4.	VSWR Alarm	VSWR 5:1 (Over 25dBm)
	5.	FWD Power Monitor	33dBm = 4±0.1V (100mV/dB)
	6.	+28V_IN	
	7.	GND	
	8.	GND	
	9.	Over Temp Alarm	85±5°C Shutdown 65±5°C Auto Enable
DC INPUT Connector (D-Sub 9Pin Male)	1,6		+27V
	2,7,8		GND

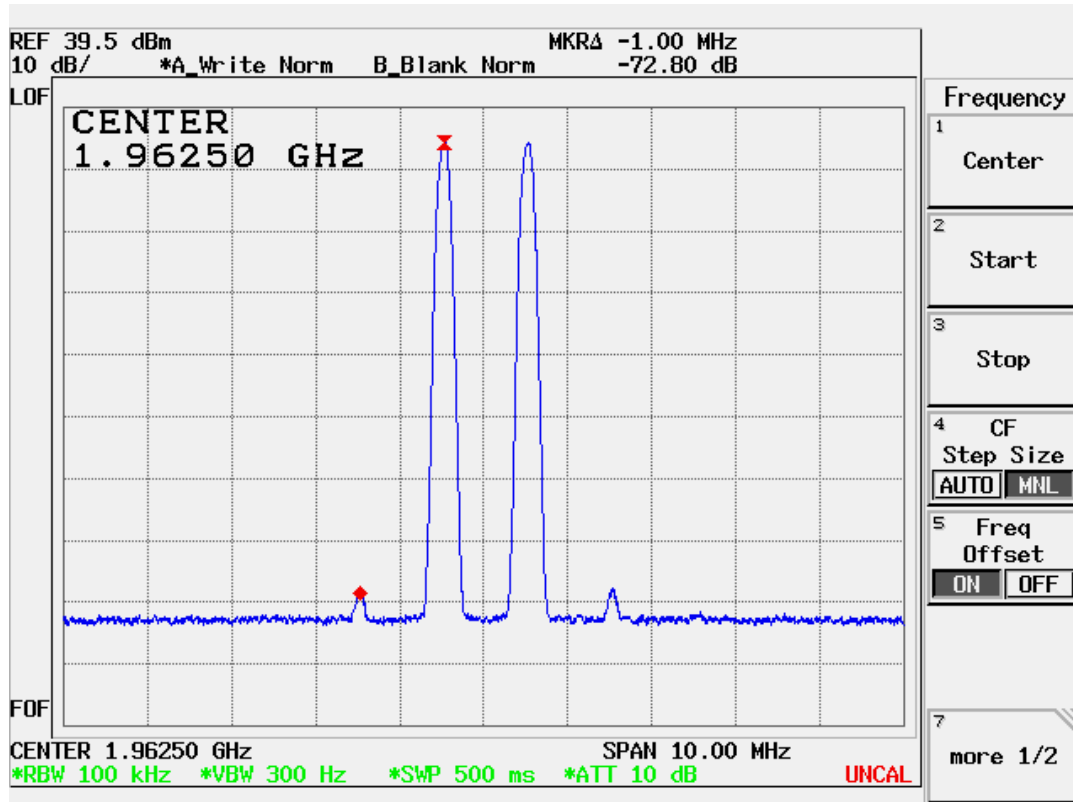
Over Power Shutdown = 37±1dBm

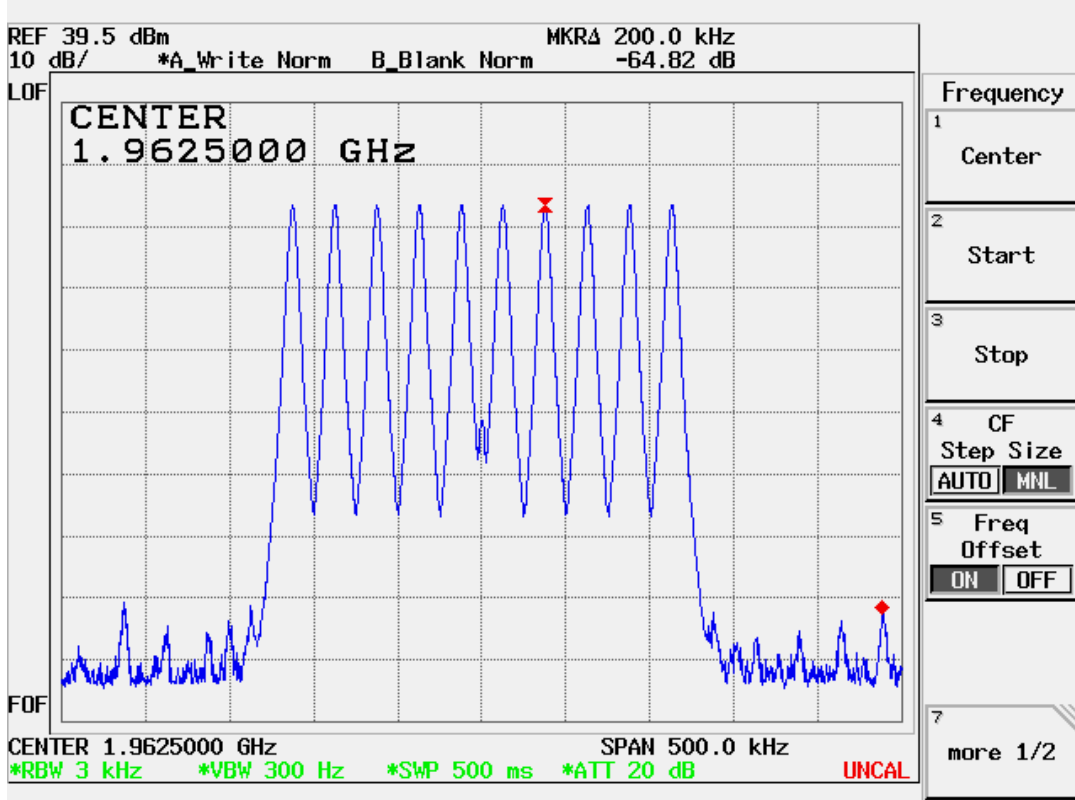
USPCS1900 / GSM1900 MCCA, UMTS(WCDMA) U.L RF Amplifier



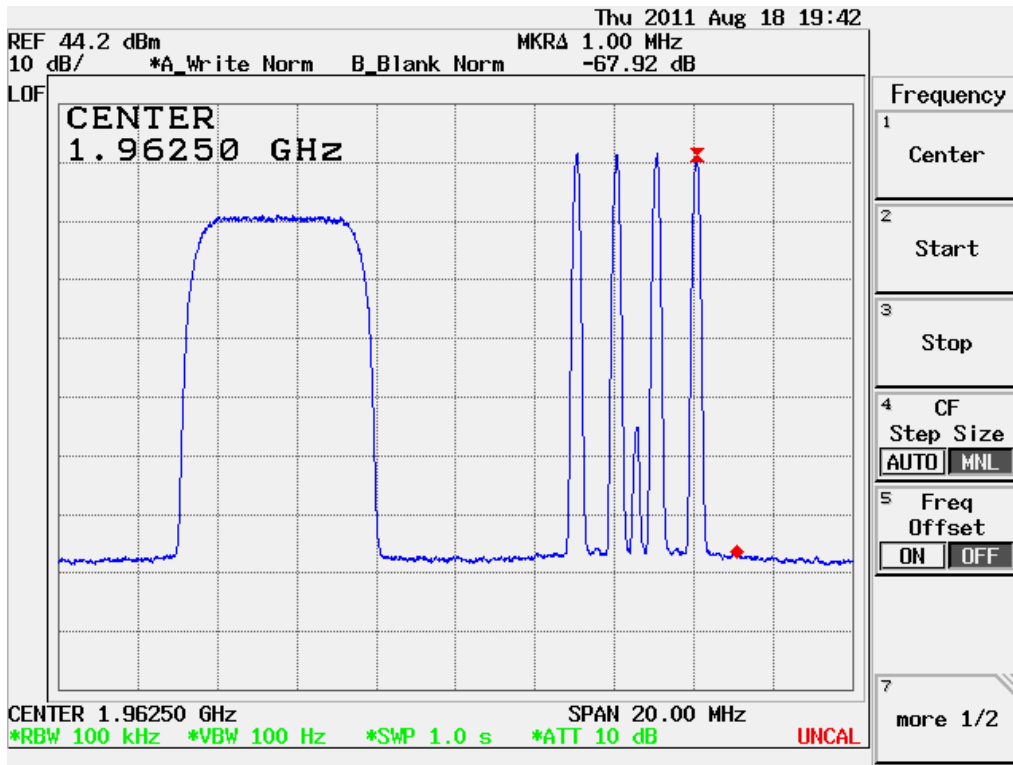
5. Electrical Test Data

5.1 IMD @Po=+35.5dBm(CW 2/10 Tone) / DC 28V, 1.4A





5.2 "1" UMTS (W-CDMA)@ 32.5dBm + 4 C.W 32.5dBm, total 35.5dBm



6. Outline Drawing

