



## Product Features

- Professional TETRA & TETRAPOL MCPA Design Amplifier
- Excellent Suppression IMD & Multi Carrier Application
- High efficiency & High OIP3[>70dBm] RF Amplifier
- Suitable for Analog & Digital Modulation
- Feed - Forward Technology Amplifier[FFTA]

TETRA Amplifier  
TETRAPOL Amplifier  
PAMR  
T-GSM 380, T-GSM-410  
T-GSM 450, T-GSM 480  
**Multi Carrier RF Amplifier**

## Application

- TETRA & TETRAPOL Repeater, Booster, BDA, TMB

## 1. Electrical Specification.

Parameter	Specification	Remark
Frequency Range	470~510MHz	40MHz BW
Output Power	38dBm(6.3W)	ALC 40dBm : Min 10dB
Gain	45dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20°C~+60°C
IMD	< -71dBc	CW 2 tone, Ch Sp. : 100kHz
Harmonic	-45dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+27V	
DC Current Consumption	2.0A max.	@38dBm
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 : 150mm X 180mm X 28mm , Weight : 1.34Kg

### 4. Pin Assignment

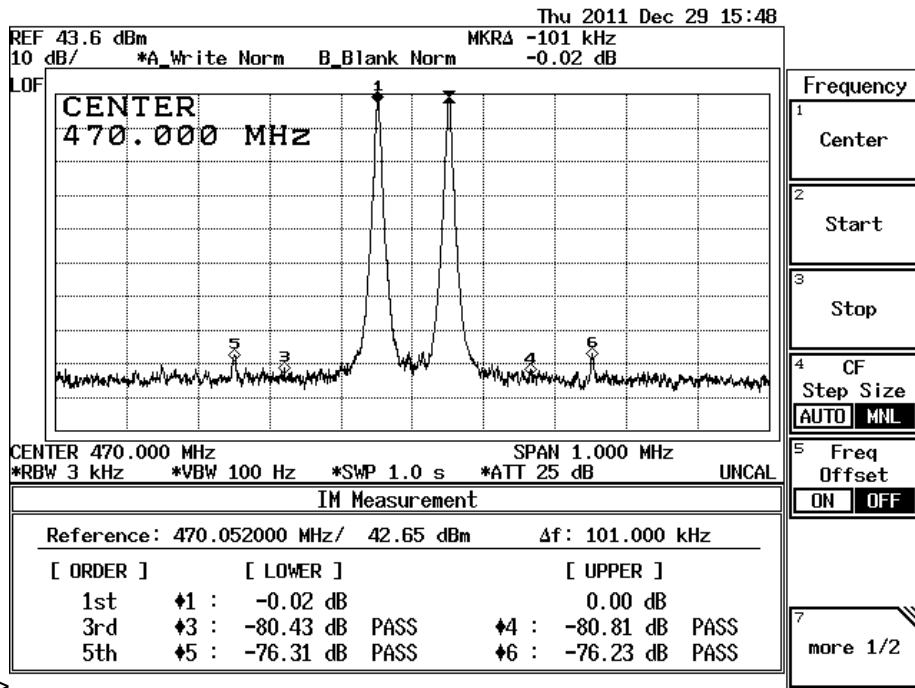
I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+40dBm±1dB Shutdown High
	2. High Temp. Alarm	High (shut-down) Low (Normal) Alarm & Shutdown +90°C ↑ Auto Recovery +70°C ↓
	3. VSWR Alarm	High (Alarm) Low (Normal) 30dBm(Output Open)
	4. Temp. Monitor	$V_o = (T / 100) + 500mV$
	5. LPA Status	High (Inactive), Low (Active)
	6. Loop Fail Alarm	High (shut-down) Low (Normal)
	7. FWD Power Monitor	4.0V@Po=+38dBm, 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	



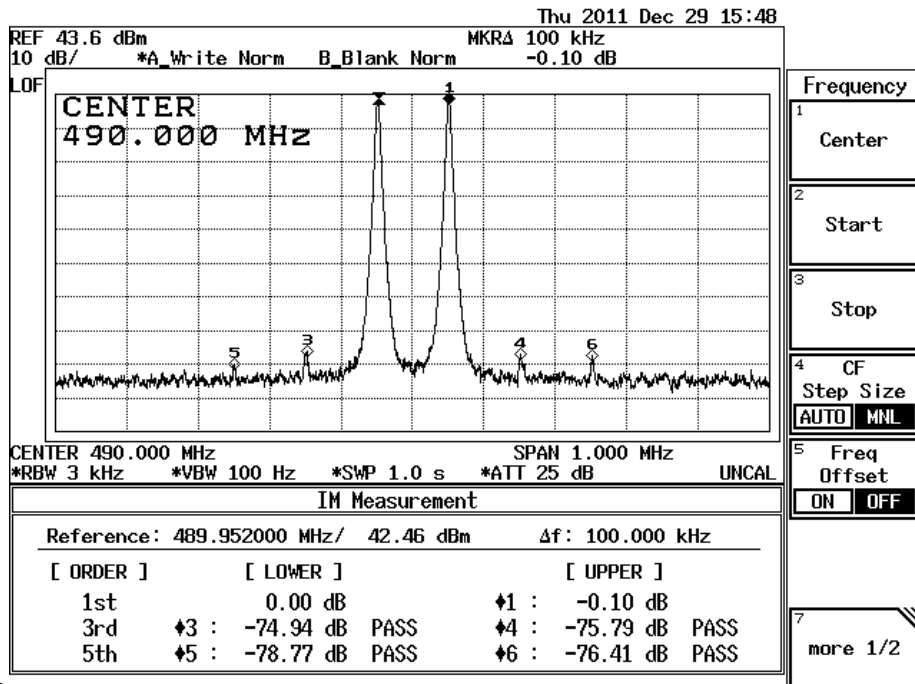
### 5. Electrical Test Data

5.1 IMD @Po=+38dBm(CW 2 Tone) / DC 27V, 1.7A

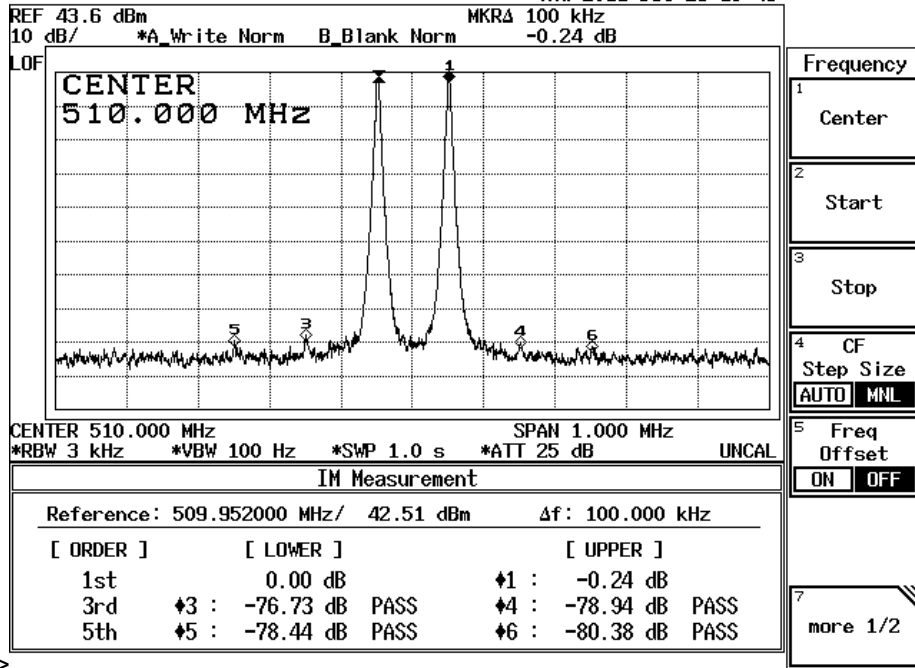
#### ■ Spectrum Analyzer Data



< IMD @ 470MHz >



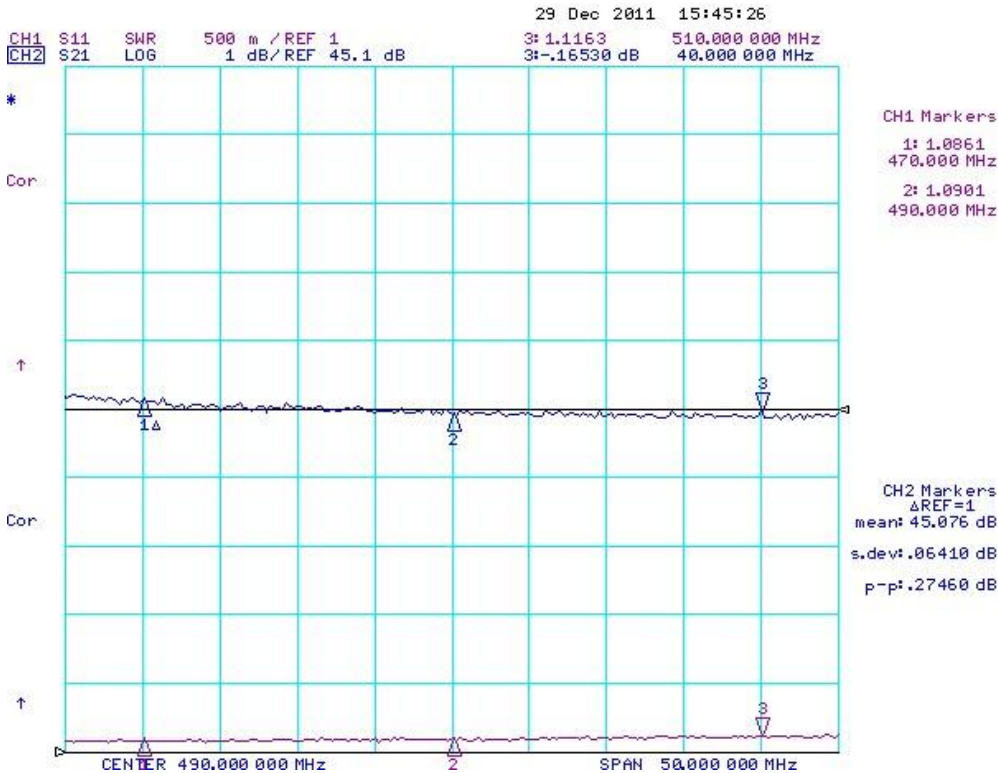
< IMD @ 490MHz >



< IMD @ 510MHz >

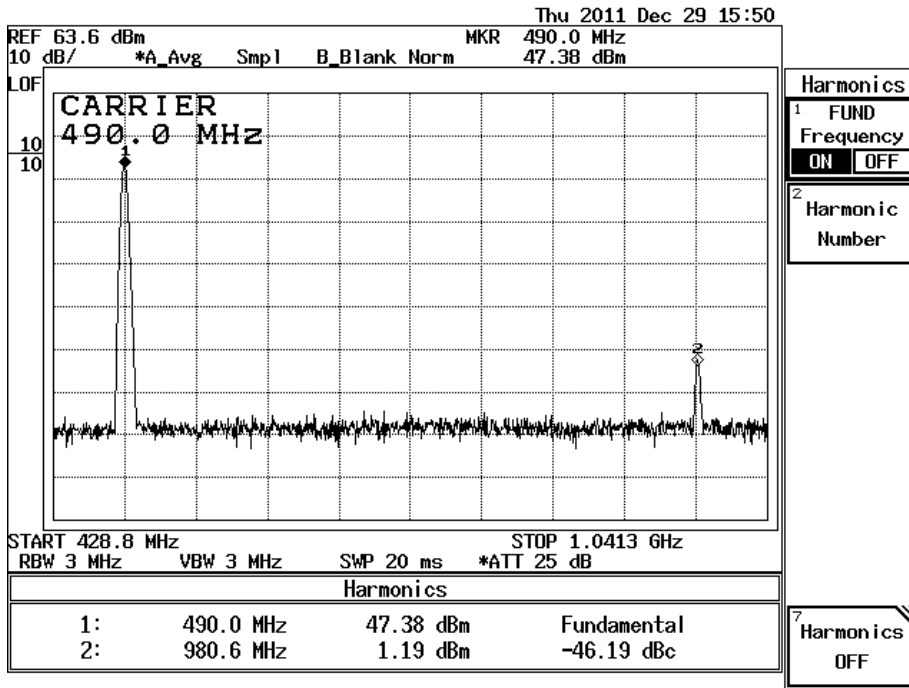
■ Network Analyzer Data

< S11 & Gain >

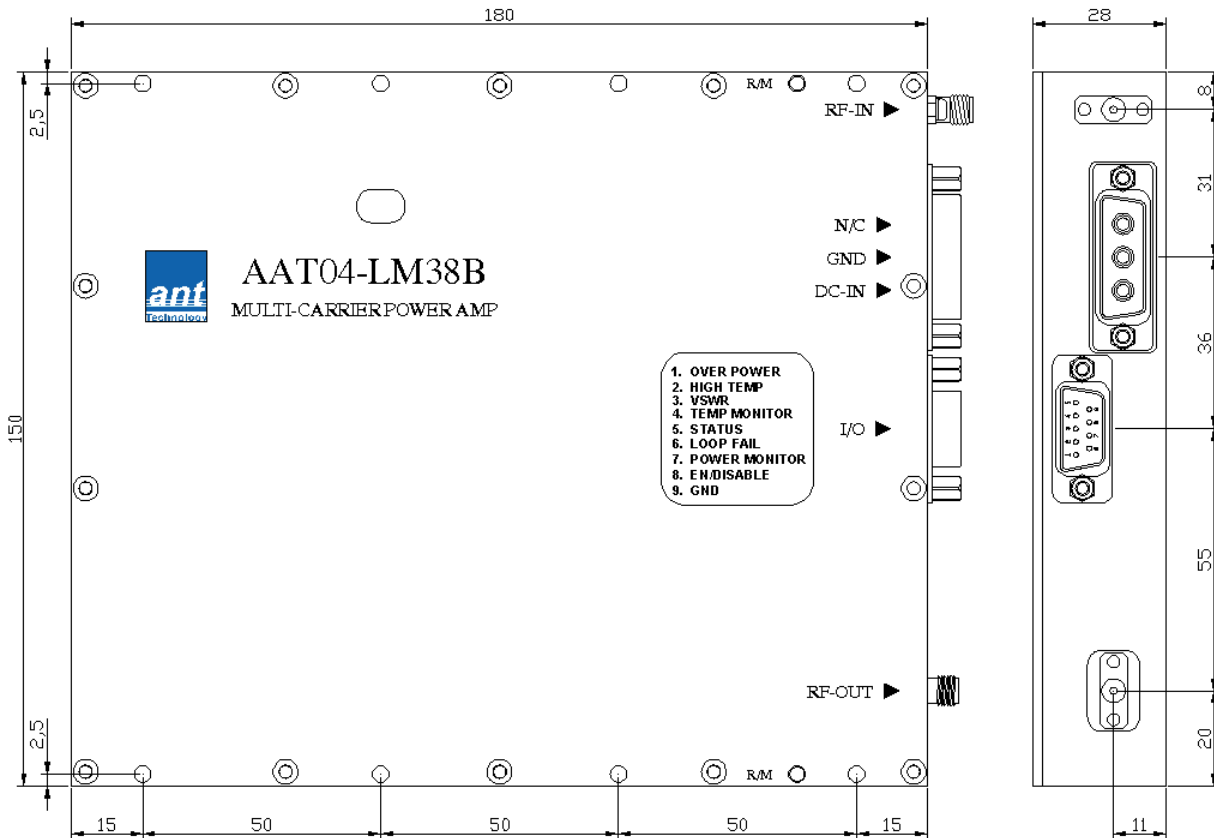




< Harmonics @ 490MHz >



6. Outline Drawing





## 7. Photo

