

# TRS Multi Carrier RF Amplifier

**HD29614**

**851 – 866 MHz / 20 Watts**

## Product Features

- Multi carrier power amplifier
- Solid State power amplifier
- High linearity and high efficiency
- 50 ohms input / output impedance

## Application

- TRS Repeater

## 1. Electrical Specification



Parameter	Specification	Remark
Frequency Range	851MHz~866MHz	15MHz BW
Output Power	20W	ALC 25W : Min 10dB
Gain	54dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20 °C~+60 °C
IMD	< -60dBc	CW 10 tone, Ch Sp. : 25kHz
Harmonic	-45dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+27V	
DC Current Consumption	5.5A max.	@20W
Output protection	Isolator	
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 185mm X 28mm

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### 4. Pin Assignment

I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+45dBm±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=+43dBm, 0.1V/dB
	8. Enable/Disable	High (Disable) Open & Low (Enable)
	9. GND	
	DC Fail Alarm	$\leq 19V \sim 31V \leq$ : Shut down 21V ~ 29V : Auto Recovery
I/O Interface (3W3P Male)	A1. VCC	+27V
	A2. GND	
	A3. N.C	

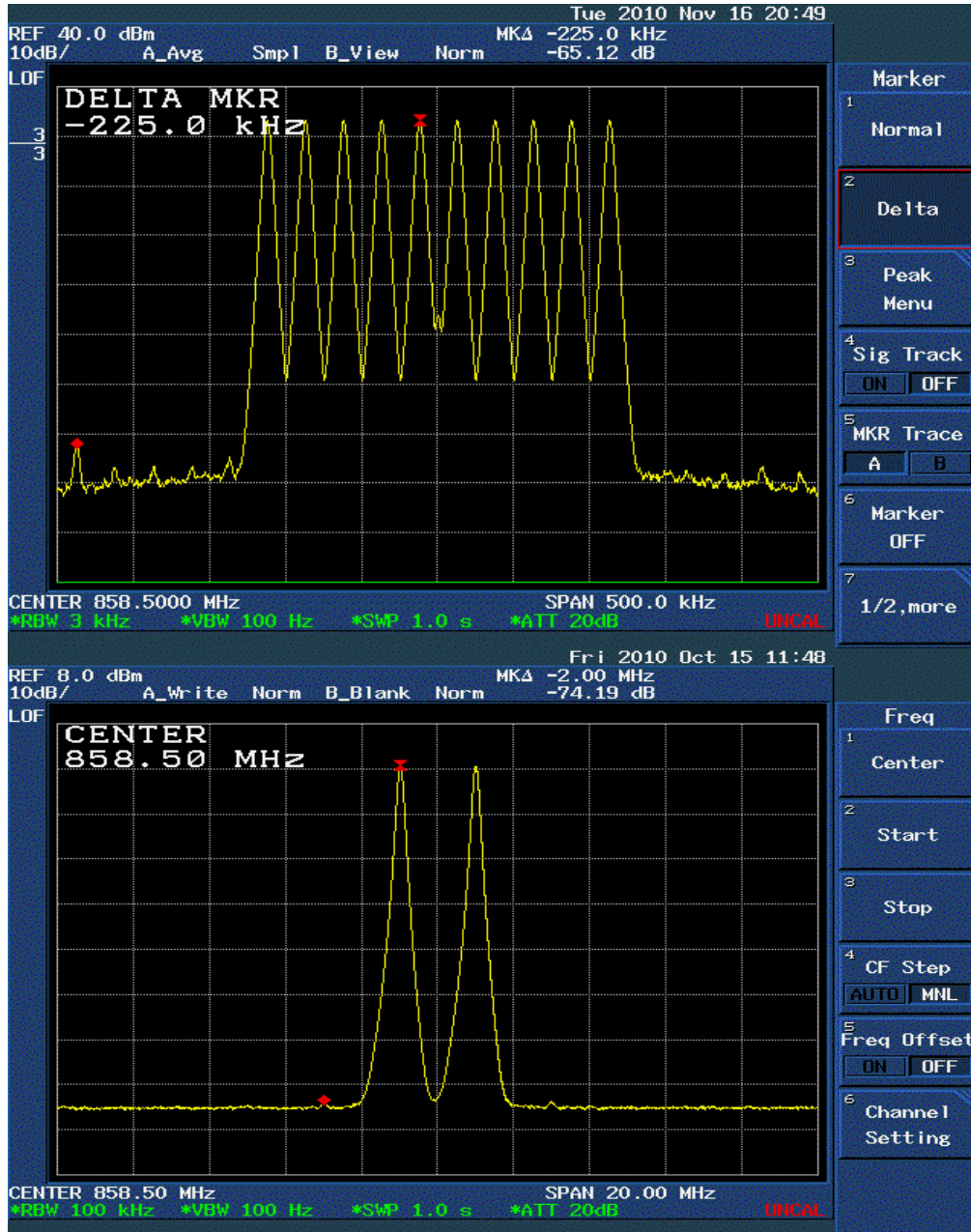
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## 5. Electrical Test Data

5.1 IMD @Po=+43dBm(CW 10 Tone / CW 2 Tone) / DC 27V, 4.8A



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## 6. Outline Drawing

