

TRS Multi Carrier RF Amplifier

HD29615

851 – 867 MHz / 40 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~867MHz	16MHz BW
Output Power	40W	ALC 50W : Min 10dB
Gain	56dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20 °C ~+60 °C
IMD	< -60dBc	CW 8 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	9A max.	@40W
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=+48dBm±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=+46dBm, 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	

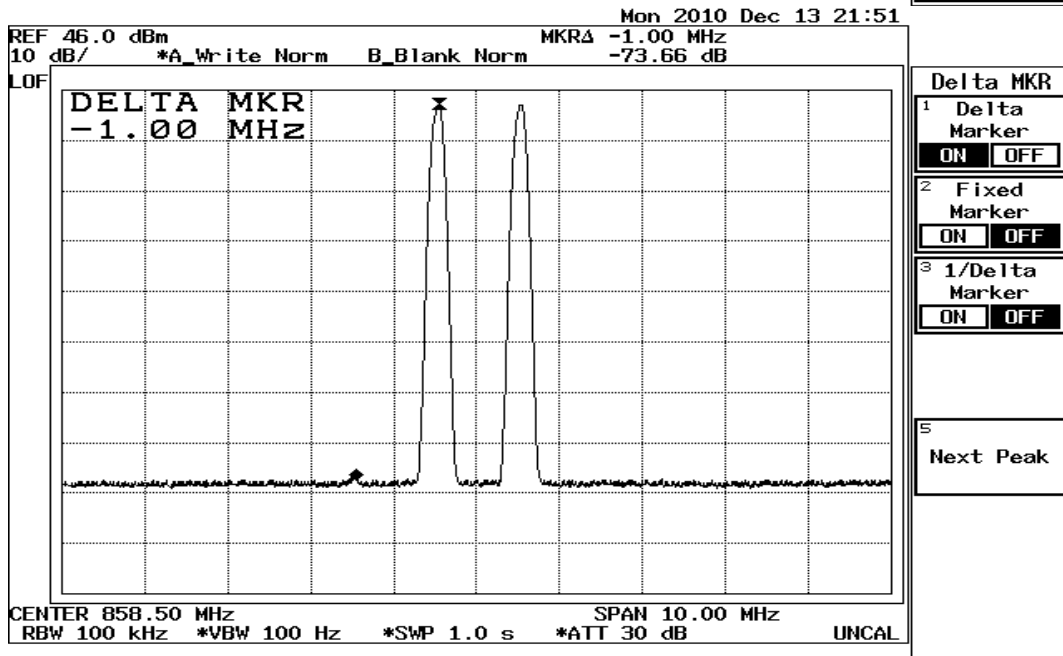
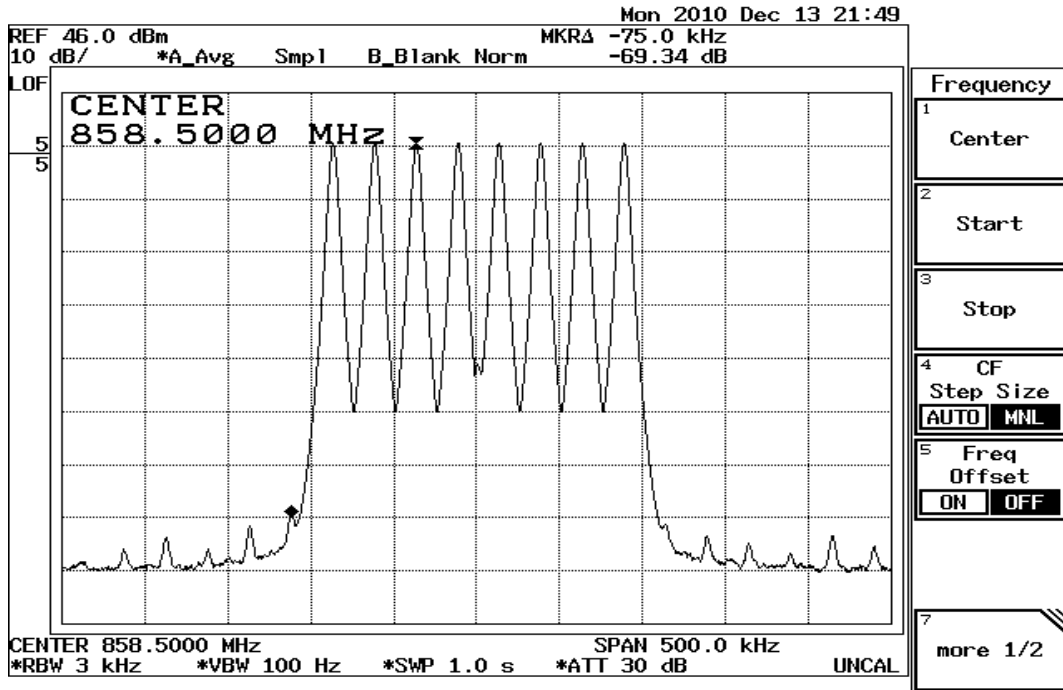
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5. Electrical Test Data

5.1 IMD @Po=+46dBm(CW 8 Tone / CW 2 Tone) / DC 27V, 8.5A



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6. Outline Drawing

