

TRS Multi Carrier RF Amplifier

HD29604

1805-1840 / 1840-1880 MHz

Product Features

- Multi carrier power amplifier [DCS1800 MCPA]
- Excellent Suppression IMD
- High linearity and high efficiency
- Suitable for Analog & Digital Modulation
- Feed – Forward Technology Amplifier [FFTA]

Application

- DCS Repeater & Booster



1. Electrical Specification.

Parameter	Specification	Remark
Frequency Range	1805~1840 / 1840~1880MHz	35~40MHz BW specify
Output Power	20W	ALC 44dBm : Min 10dB
Gain	54dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20℃~+ 60℃
IMD	< -60dBc	CW 2 tone, Ch Sp. : 1MHz
	< -60dBc	CW 16 tone, Ch Sp. : 600kHz
Harmonic	-45dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+ 27V	
DC Current Consumption	6.0A max.	@20W
Shut-down Temp Level	90±5℃	70±5℃ Auto Enable

2. Environmental Specification

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

3. Mechanical Specification.

Physical Dimension : 150mm X 185mm X 28(to be 35)mm

4. Pin Assignment

I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+ 45dBm±1dB Shutdown High
		High (shut-down)
	2. High Temp. Alarm	Low (Normal)
		Alarm & Shutdown + 90℃ ↑ Auto Recovery + 70℃ ↓
	3. VSWR Alarm	High (Alarm)
		Low (Normal)
		30dBm(Output Open)
	4. Temp. Monitor	Vo=(T / 100)+ 500mV
	5. LPA Status	High (Inactive), Low (Active)
I/O Interface (3W3P Male)	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	≤19V ~ 31V≤ : Shut down 21V ~ 29V : Auto Recovery
	A1. VCC	+ 27V
	A2. GND	
	A3. N.C	

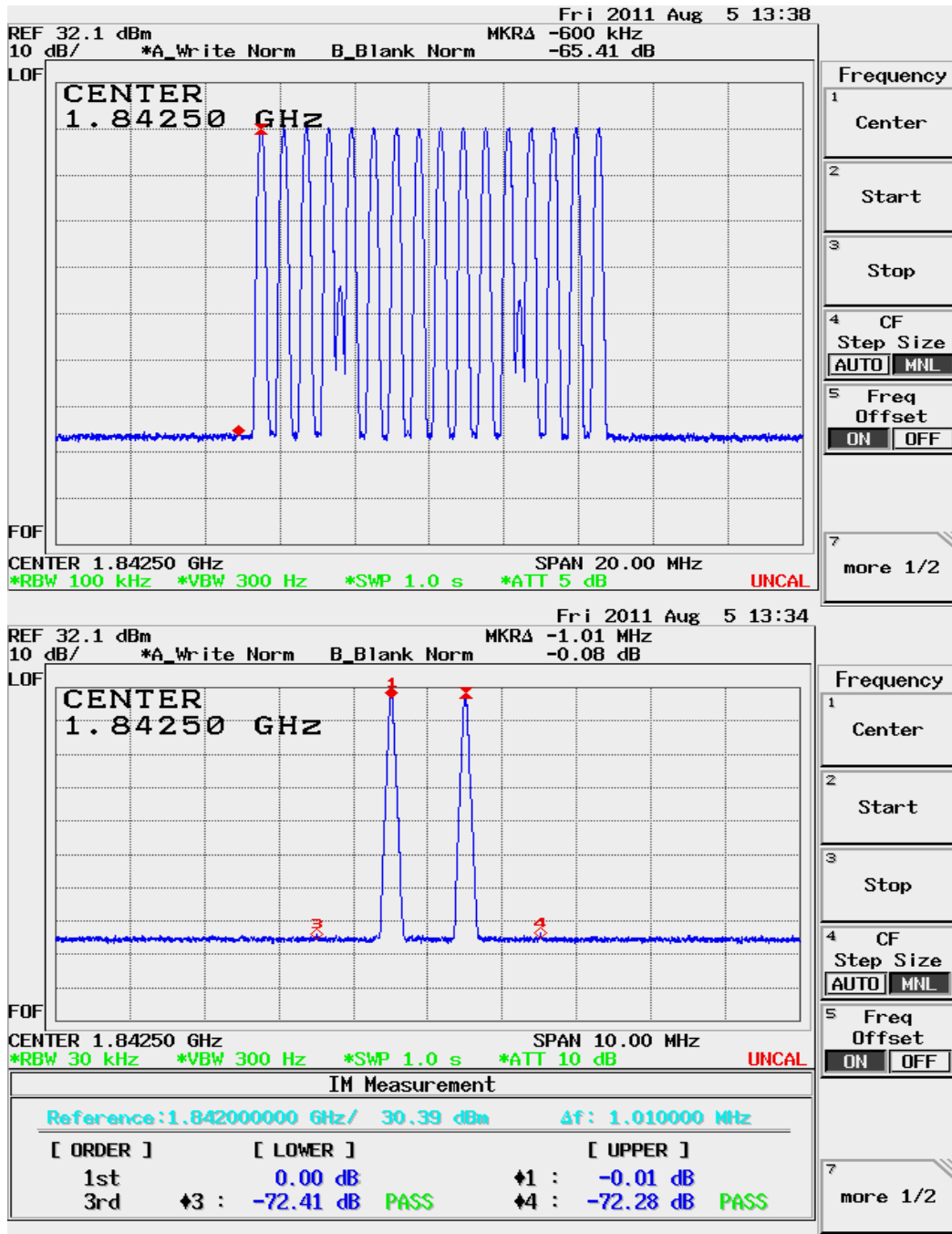
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5. Electrical Test Data

5.1 IMD @Po=+43dBm(CW 16 Tone / CW 2 Tone) / DC 27V, 5.0A



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6. Outline Drawing

