

Multi Carrier Power Amplifier

HD29603

1805 – 1880 MHz / 10Watts

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	1805MHz~1880MHz	75MHz BW
Output Power	10W	ALC 42dBm : Min 10dB
Gain	50dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20℃ ~ +60℃
IMD	< -70dBc < -60dBc	CW 2 tone, Ch Sp. : 1MHz 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	3.5A max.	@10W
Shut-down Temp Level	90±5℃	70±5℃ Auto Enable



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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 : 155mm X 185mm X 35mm, 1.6Kg

4. Pin Assignment

I/O Interface (D-Sub 9Pin Male)	1. Over Power Alarm	Po=+ 43dBm±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=+ 40dBm, 0.1V/dB
	8. Enable/Disable	High (Disable) Open & Low (Enable)

332-C Dante Court

Holbrook, NY 11741

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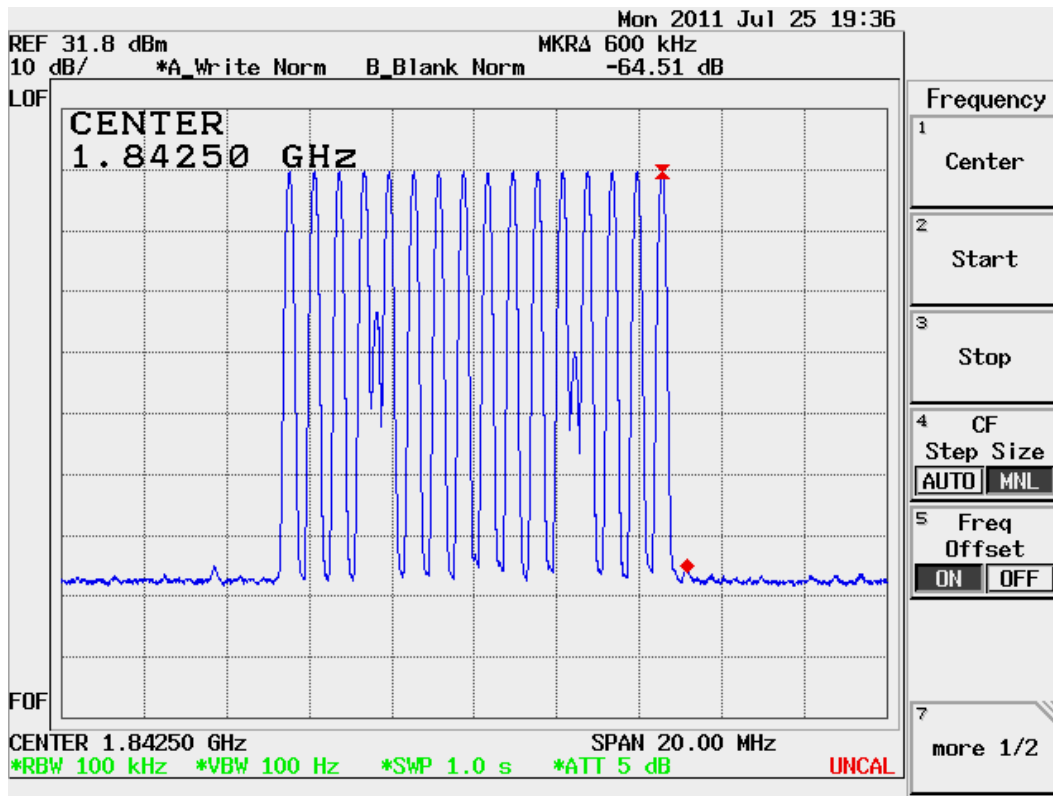
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	9. GND	
	DC Fail Alarm	$\leq 19V \sim 31V \leq$: Shut down $21V \sim 29V$: Auto Recovery
I/O Interface (3W3P Male)	A1. VCC	+ 27V
	A2. GND	
	A3. N.C	

5. Electrical Test Data

5.1 IMD @Po=+ 40dBm(CW 16 Tone / CW 2 Tone) / DC 27V, 2.8A



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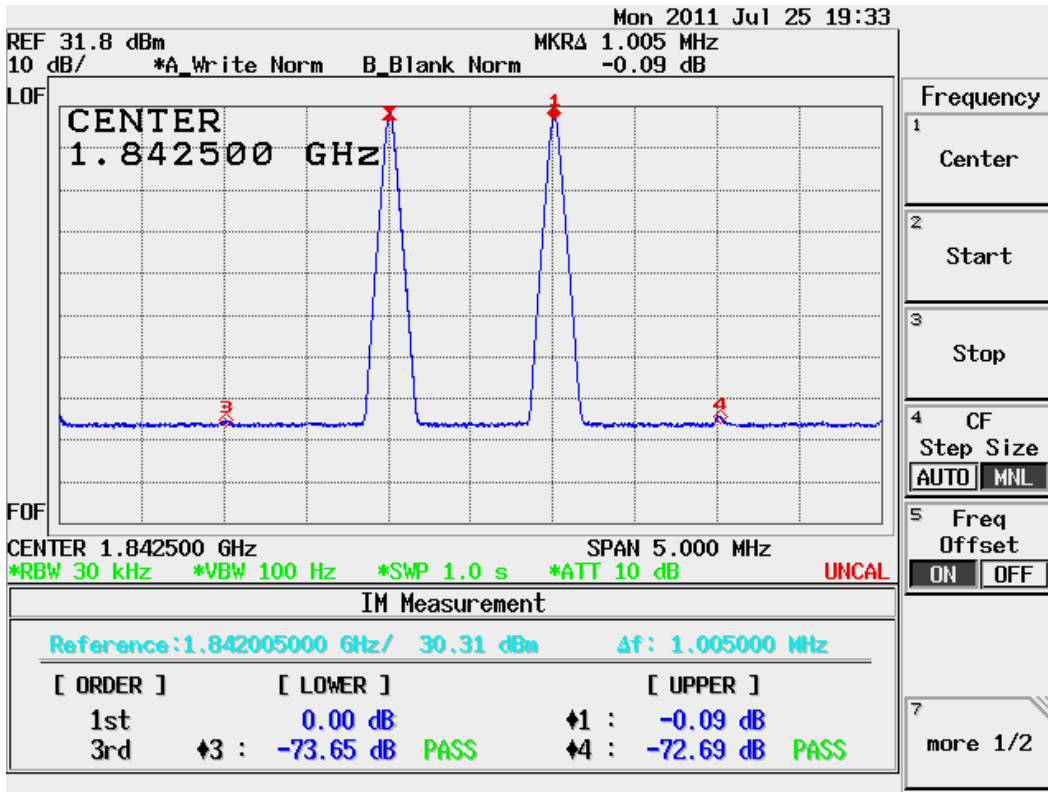
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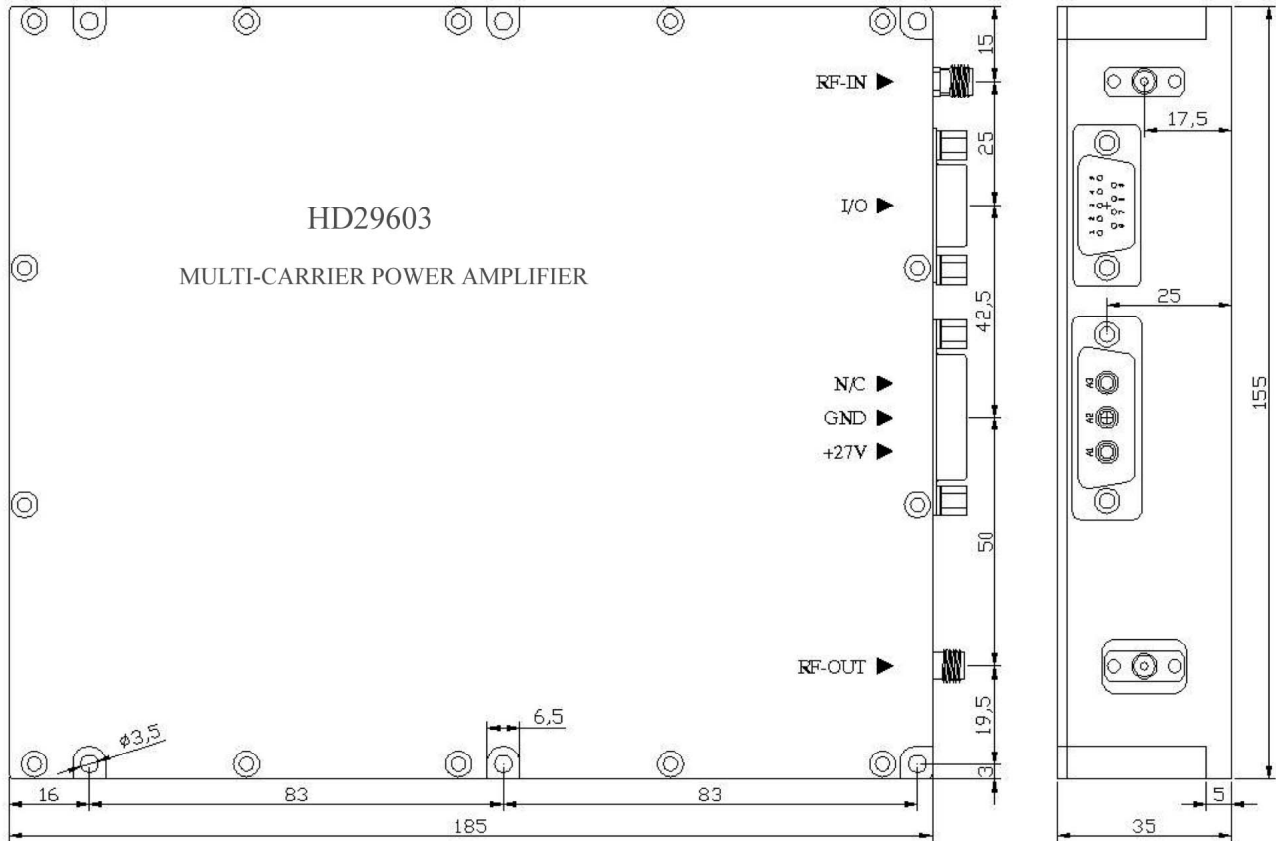


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6. Outline Drawing



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