

Product Features

- DCS1800, GSM1800 MCPA RF Amplifier
- Multi Carrier Operation
- High linearity and high efficiency
- 50 ohms input / output impedance

Application

- DCS1800, GSM1800 Repeater, BDA, TMB



**DCS1800, GSM1800
Multi Carrier RF Amplifier**

1. Electrical Specification.

Parameter	Specification	Remark
Frequency Range	1805~1880MHz	30MHz instantaneous BW
Output Power	20W	ALC 44dBm : Min 10dB
Gain	50dB±1dB	
Gain Flatness	±0.5dB	
Gain Variation Over Temp.	±1dB max	-20°C~+60°C
IMD	< -70dBc	CW 2 tone, Ch Sp. : 1MHz
Harmonic	-45dBc max	
Input VSWR	1.5:1 max.	
Output VSWR	1.5:1 max.	Isolator Applied
Normal Operating Voltage	+27V	
DC Current Consumption	4A max.	@20W
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.

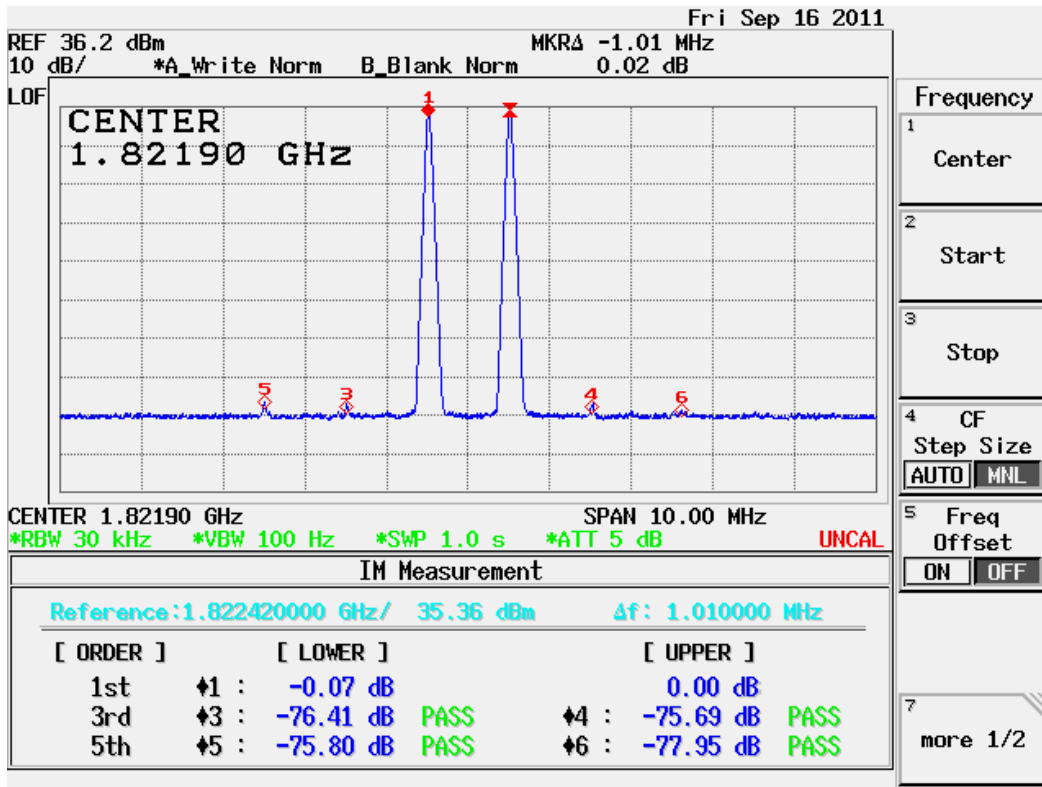
Physical Dimension : 155mm X 185mm X 35mm

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	≤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

IMD @Po=+43dBm(CW 2 Tone) / DC 27V, 3.7A



6. Outline Drawing

