

TRS Multi Carrier RF Amplifier

HD29613

806 – 821 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 | 806MHz~821MHz | 15MHz BW |
| Output Power | 5W | ALC 38dBm : Min 10dB |
| Gain | 52dB±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 | 2.0A max. | @5W |
| 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 : 120mm X 150mm X 28mm

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4. Pin Assignment

| | | | |
|---|-----|--------------------|---|
| I/O Interface (D-Sub 9Pin Male) | 1. | +27V_IN | |
| | 2. | +27V_IN | |
| | 3. | En/Disable Control | High (Disable) Open & Low (Enable) |
| | 4. | GND_IN | |
| | 5. | GND_IN | |
| | 6. | Over Power Alarm | 39dBm±1dB |
| | 7. | VSWR Alarm | 30dBm(Output Open) |
| | 8. | High Temp. Alarm | High (shut-down) Low (Normal) Alarm & Shutdown +90°↑ Auto Recovery +70°↓ |
| | 9. | FWD Power Monitor | 4V / 37dBm |
| DC INPUT Connector (D-Sub 9Pin Male) | 1,2 | +27V | |
| | 4,5 | GND | |

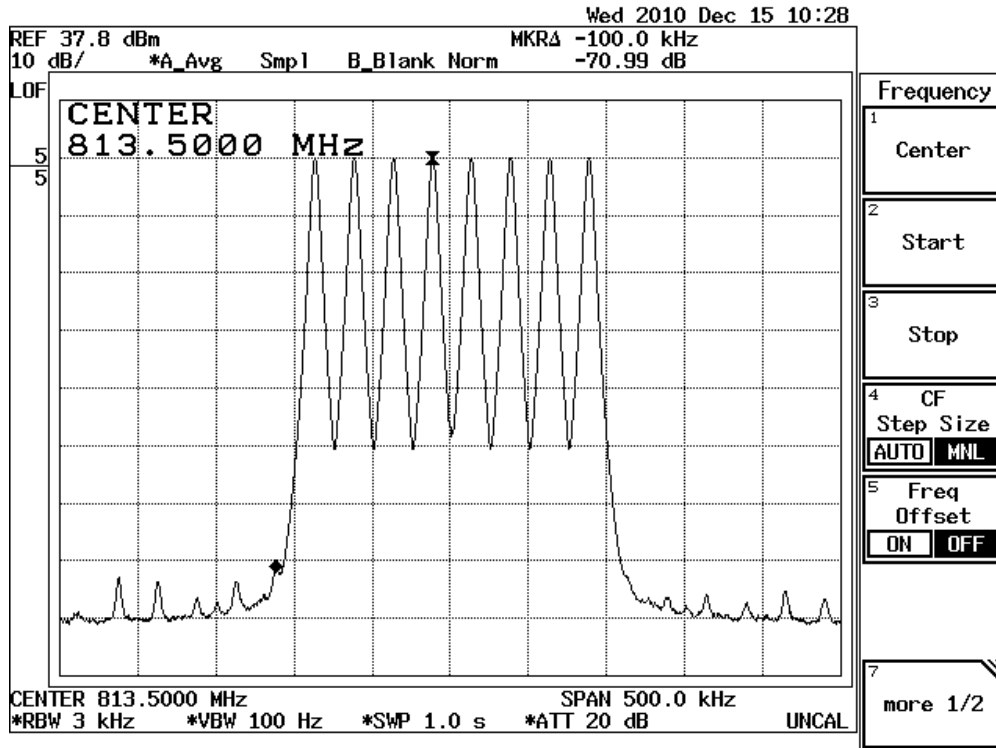
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5. Electrical Test Data

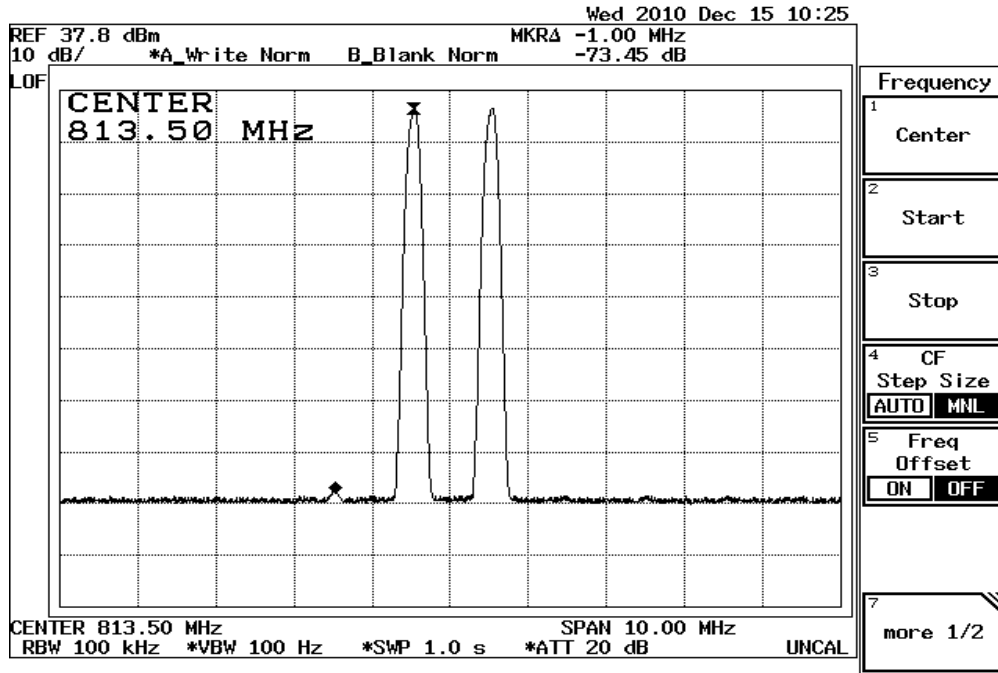
IMD @Po=+37dBm(CW 8 Tone / CW 2 Tone) / DC 27V, 1.6A



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6. Outline Drawing

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