| HD29465 | 935 – 960 MHz / 25MHz BW |
|---|---|

## Specification for MCPA of GSM System

### 1. Electrical Specification.

| Parameter | Specification | Remark |
|---|---|---|
| **Frequency Range** | 935MHz~960MHz | 25MHz BW |
| **Output Power** | 20W | |
| **Gain** | 54dB±1dB | |
| **Gain Flatness** | ±0.5dB | |
| **Gain Variation Over Temp.** | ±1dB max | -20º~+60º |
| **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** | 5.2A max. | @ 20W |
| **Output protection** | Isolator | |
| **Shut-down Temp Level** | 90±5º | 70±5º Auto Enable |

### 2. Environmental Specification

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

### 3. Mechanical Specification.

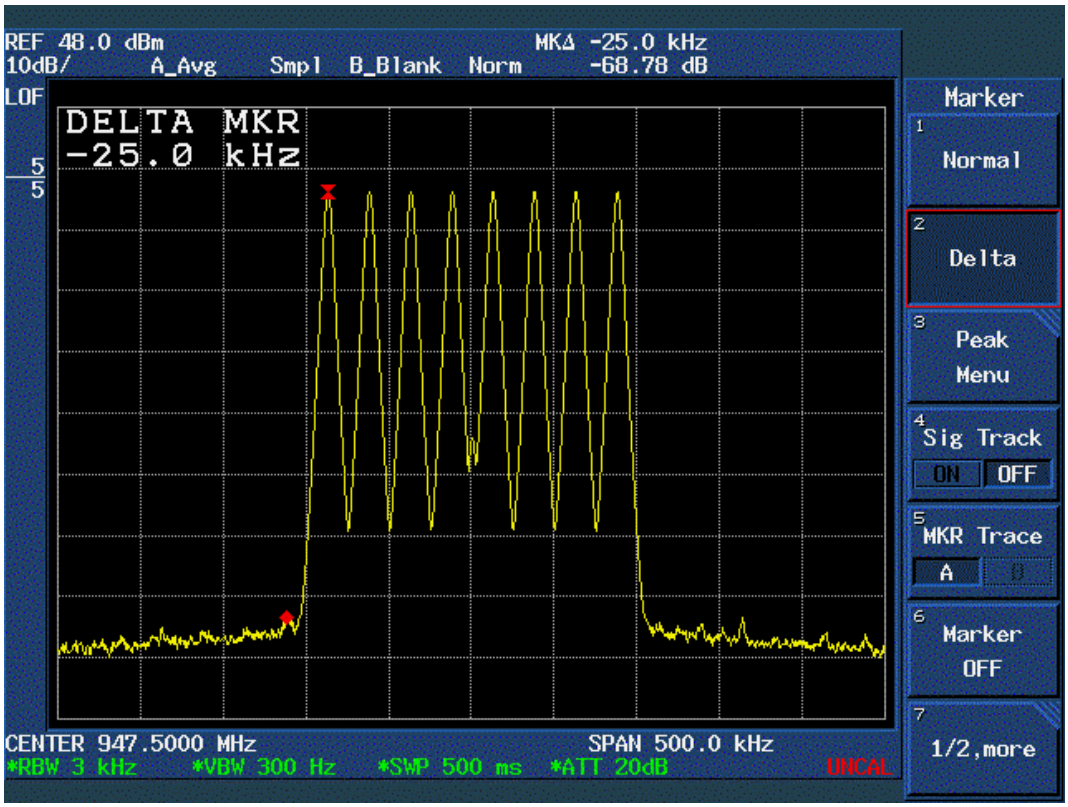
Physical Dimension : 150mm X 185mm X 28mm

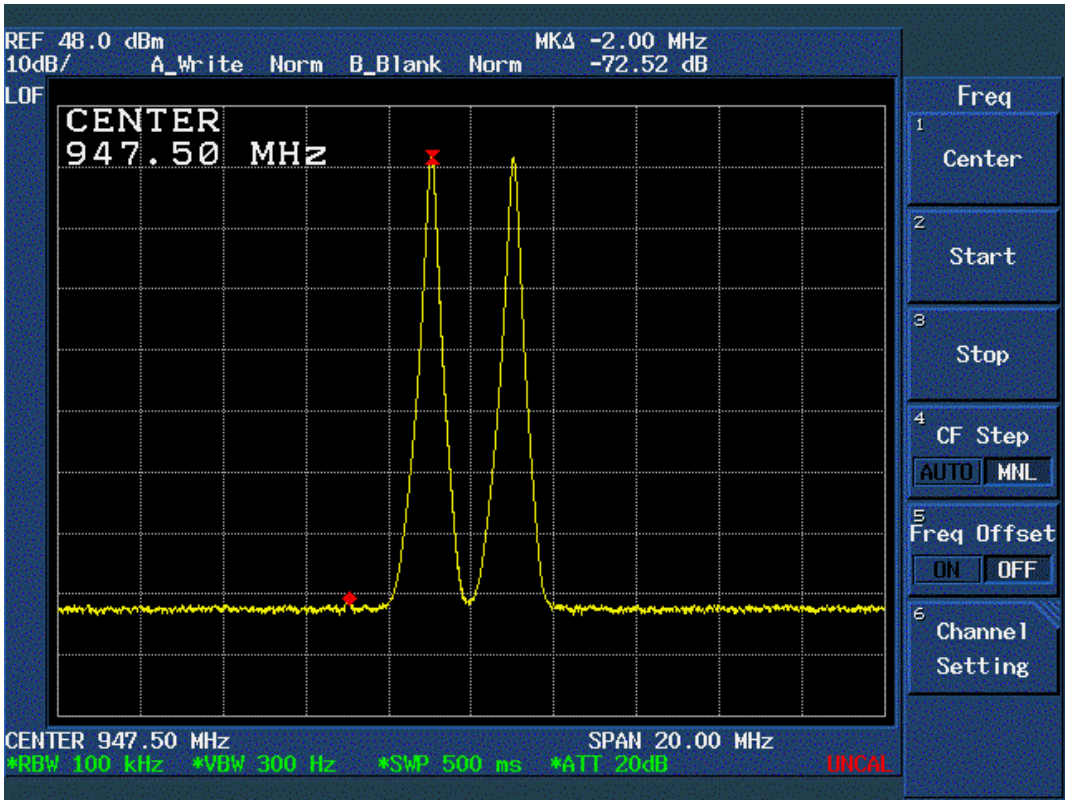
## 4. Pin Assignment

| | | |
|---|---|---|
| I/O Interface<br>(D-Sub 9Pin Male) | 1. Over Power Alarm | Po=+45dBm±1dB<br>Shutdown High |
| | 2. High Temp. Alarm | High (shut-down)<br>Low (Normal)<br>Alarm & Shutdown +90º↑<br>Auto Recovery +70º↓ |
| | 3. VSWR Alarm | High (Alarm)<br>Low (Normal)<br>30dBm(Output Open) 3 second later |
| | 4. Temp. Monitor | Vo=(T / 100)+500mV |
| | 5. LPA Status | High (Inactive), Low (Active) |
| | 6. Loop Fail Alarm | High (shut-down)<br>Low (Normal) |
| | 7. FWD Power Monitor | 4.0V@Po=+43dBm, 0.1V/dB |
| | 8. Enable/Disable | High (Disable)<br>Open & Low (Enable) |
| | 9. GND | |
| | DC Fail Alarm | 19V ~ 31V : Shut down<br>21V ~ 29V : Auto Recovery |
| I/O Interface<br>(3W3P Male) | A1. VCC | +27V |
| | A2. GND | |
| | A3. N.C | |

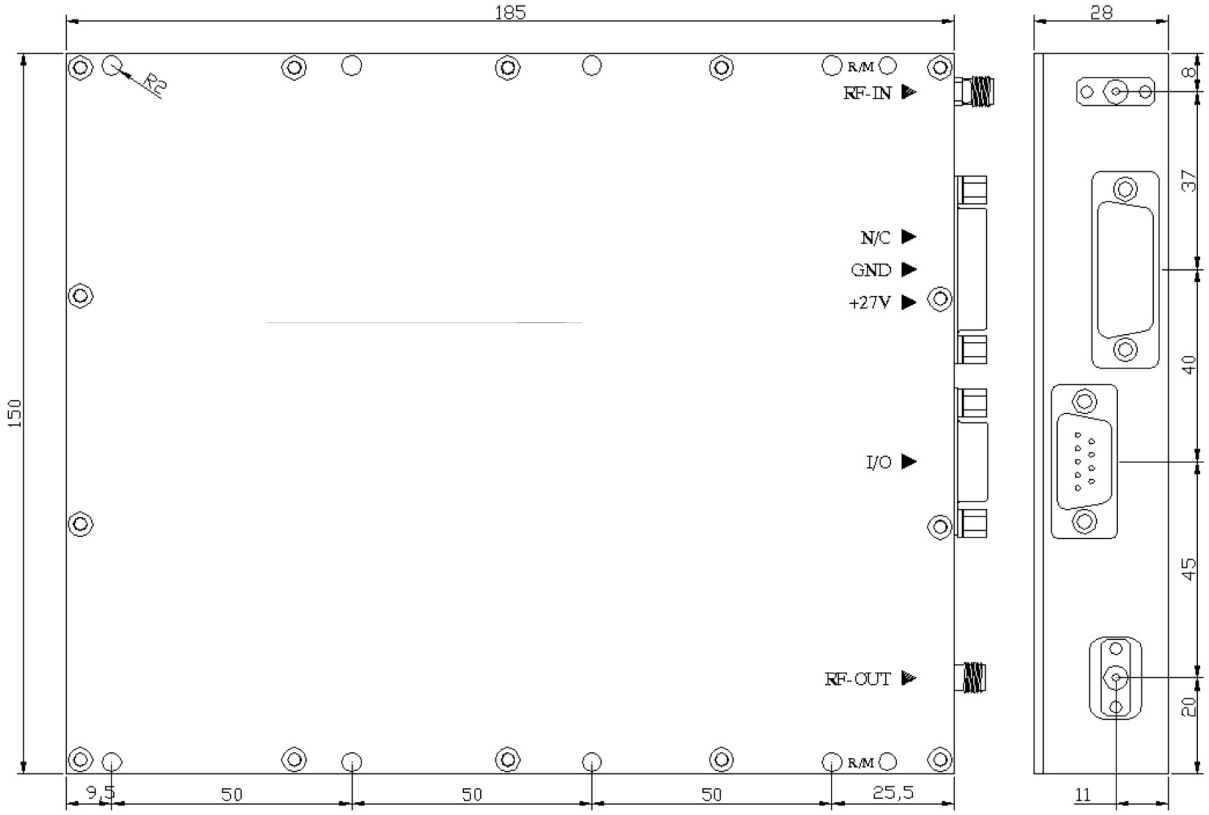
## 5. Electrical Test Data

5.1 IMD @Po=+43dBm(CW 8 Tone / CW 2 Tone) / DC 27V, 5.0A

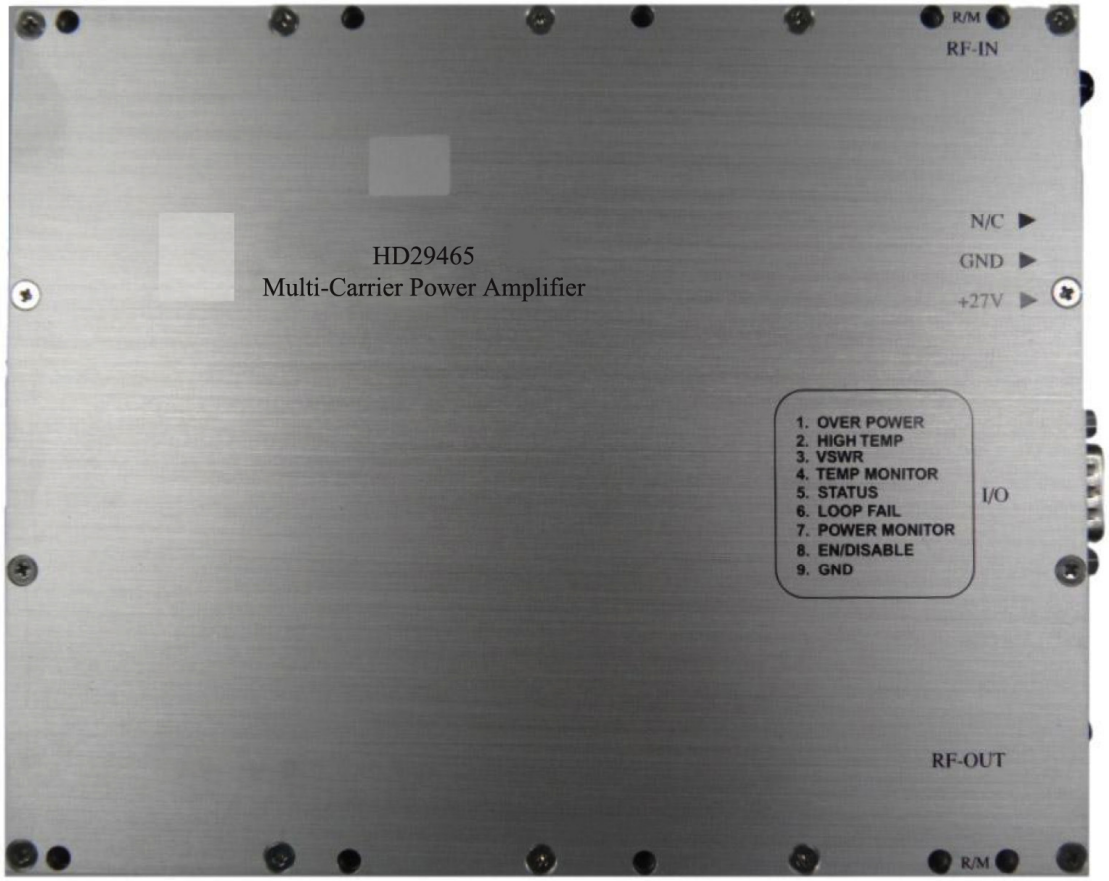



REF 48.0 dBm
MKΔ -2.00 MHz
10dB/ A_Write Norm B_Blank Norm -72.52 dB
LOF
CENTER
947.50 MHz
CENTER 947.50 MHz
SPAN 20.00 MHz
*RBW 100 kHz *VBW 300 Hz *SWP 500 ms *ATT 20dB
UNCAL
Freq
1 Center
2 Start
3 Stop
4 CF Step
AUTO MNL
5 Freq Offset
ON OFF
6 Channel Setting

## 6. Outline Drawing



**7. Photo**

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