### **Broadband High Power Amplifier**

Product Name: RCA0810H53S

Doc. Name: Preliminary Short Spec.

# Preliminary Short Specification for RCA0810H53S

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| Created                                | Printed   | Document Number | Revision | Manufacturer   |
|--|-----------|-----------------|----------|----------------|
| 2014/5/13                              | 2017/1/17 |                 | В        | RFcore co.,Ltd |
| File: RCA0810H53S Short Spec_revB.docx |           |                 |          |                |

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| ELECTRICAL SPECIFICATIONS            | @ 50 Ω load, Tcase ≒ 35°C, 28Vdc |                                  |
|--------------------------------------|----------------------------------|----------------------------------|
| Parameter                            | Specification                    | Remark                           |
| Frequency Range                      | 800 ~ 1000 MHz                   |                                  |
| Saturated Output Power               | 200 W min.                       |                                  |
| Small Signal Gain @ Center Frequency | 55 ± 1.0 dB                      | Input = -15 dBm                  |
| Gain Flatness                        | Peak to Peak 4 dB                | Input = -15 dBm, Over Freq .Band |
| Maximum Input Power for no damage    | 5 dBm max.                       |                                  |
| Input / Output VSWR                  | Less than 2:1                    |                                  |
| RF Input Signal Format               | CW                               |                                  |
| Current Consumption                  | 22A max.                         |                                  |
| DC Input Voltage                     | 28 ± 1.0 Vdc                     |                                  |

| Interface Pin Description      |          |                     |                                   |
|--------------------------------|----------|---------------------|-----------------------------------|
| Connector                      |          | Description         | Specification                     |
| DC Connector(3W3P)             | A1: Vcc  |                     |                                   |
|                                | A2. GND  |                     |                                   |
|                                | A3. Do n | ot connect          |                                   |
| I/O Interface(D-Sub 9Pin Male) | 1.       | Do not connect      |                                   |
|                                | 2.       | Temperature Monitor | VT={0.02(V/°C)*T(°C)+1.0V}±0.1V   |
|                                |          | remperature monitor | T=Case Temperature ± 5°C          |
|                                | 3.       | Enable (Active low) | pulled-up@5V with 20KΩ            |
|                                | 4.       | Do not connect      |                                   |
|                                | 5.       | VSWR Fail Alarm     | Alarm : High(5V)                  |
|                                | 6.       | GND                 |                                   |
|                                | 7.       | Forward Power       | 4±0.3V @ CW 53dBm,slope : 0.1V/dB |
|                                |          | Monitor             | Vpin7 = 4-(53-Pout)x0.1±0.3V      |
|                                | 8.       | Do not connect      |                                   |
|                                | 9.       | Do not connect      |                                   |

| ENVIRONMENTAL SPECIFICATIONS |               |        |
|------------------------------|---------------|--------|
| Parameter                    | Specification | Remark |
| Operating Case Temperature   | -20 ~ 70 °C   |        |
| Storage Temperature          | -40 ~ 85 ℃    |        |

| MECHANICAL SPECIFICATIONS |                                    |        |
|---------------------------|------------------------------------|--------|
| Parameter                 | Specification                      | Remark |
| Dimension                 | 250 * 170 *28 mm                   |        |
| RF Input Connector        | SMA Female                         |        |
| RF Output Connector       | N- Female                          |        |
| DC Power Connector        | 3W3P(A1 : Vcc, A2 : GND, A3 : N.C) |        |
| Control Connector         | D – SUB 9Pin Male                  |        |
| Cooling                   | Adequate Heat-sink required        |        |
|                           |                                    |        |

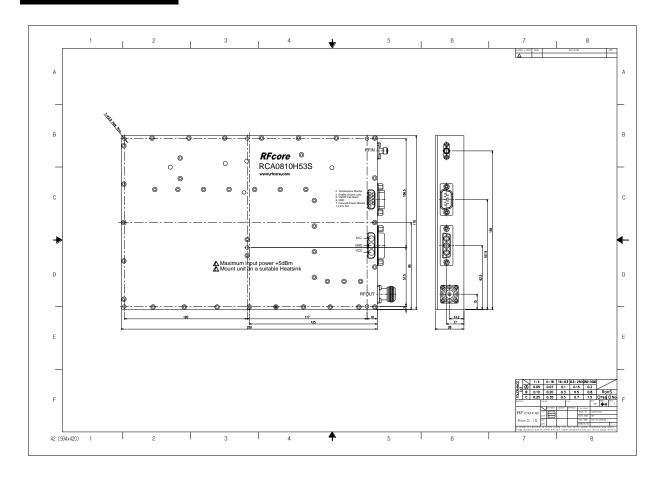
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### MECHANICAL DRAWING



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