

# Broadband High Power Amplifier

Product Name : RCA0525H47D1, Code Name : B3Y6SD3EN5048

Doc. Name : Preliminary Short Spec.

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| <p align="center"><b>Preliminary Short Specification</b><br/>for<br/><b>RCA0525H47D1</b></p> |
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| Created                             | Printed   | Document Number | Revision | Manufacturer          |
|-------------------------------------|-----------|-----------------|----------|-----------------------|
| 2013/11/11                          | 2017/1/12 |                 | A        | <b>Rfcore co.,Ltd</b> |
| File : RCA0525H47D1 Short Spec.docx |           |                 |          |                       |

*The Specifications is subject to change before finalization*

Customer Service: Tel. 82-31-708-7575

Email: [sales@rfcore.com](mailto:sales@rfcore.com)

<http://www.rfcore.com>

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| ELECTRICAL SPECIFICATIONS         |                            | @ 50 Ohms load, 28 Vdc, Tc = 35 °C  |
|-----------------------------------|----------------------------|---|
| Parameter                         | Specification              | Remark  |
| Frequency Range                   | 500 ~ 2500 MHz             |   |
| Saturated Output Power            | 50 W typ. (40W min.)       | @ CW  |
| Small Signal Gain                 | 48 dB min.                 | Input Power = -15dBm  |
| Small Signal Gain Flatness        | Peak to Peak 6.0 dB        | Input Power = -15dBm  |
| Maximum Input Power for no damage | 10 dBm                     |   |
| Input VSWR                        | Less than 2 : 1            |   |
| DC Input Voltage                  | 28 ± 1.0Vdc                |   |
| Current Consumption               | 7.0 A max.<br>6.0 A typ.   | @ Pout = 40W  |
| I/O Interface (D-Sub 9Pin Male)   | 1. Enable (Active Low)     | pulled-up @ 5V with 10k ohm   |
|                                   | 2. Forward Power Monitor   | Vpin2 is Output voltage of diode detector. It has non-log slope characteristic. |
|                                   | 3. Fast Back-off           | 5V : Back-off by 20~30 dB<br>0V : Normal Gain                                   |
|                                   | 4. Reflected Power Monitor | Vpin4 is Output voltage of diode detector. It has non-log slope characteristic. |
|                                   | 5. Temperature Monitor     | VT = 0.02 * Tc + 1.0 (V)<br>Tc is Case Temperature in degC ± 5°C                |
|                                   | 6. Vcc                     |   |
|                                   | 7. Vcc                     |   |
|                                   | 8. GND                     |   |
|                                   | 9. GND                     |   |

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

| MECHANICAL SPECIFICATIONS   |                             |        |
|-----------------------------|-----------------------------|--------|
| Parameter                   | Specification               | Remark |
| Dimension                   | 145 x 95 x 25 mm            |        |
| RF Input / Output Connector | SMA Female                  |        |
| Control Connector           | D-Sub 9Pin Male             |        |
| Cooling                     | Adequate Heat-sink required |        |

|                                     |           |                 |          |                       |
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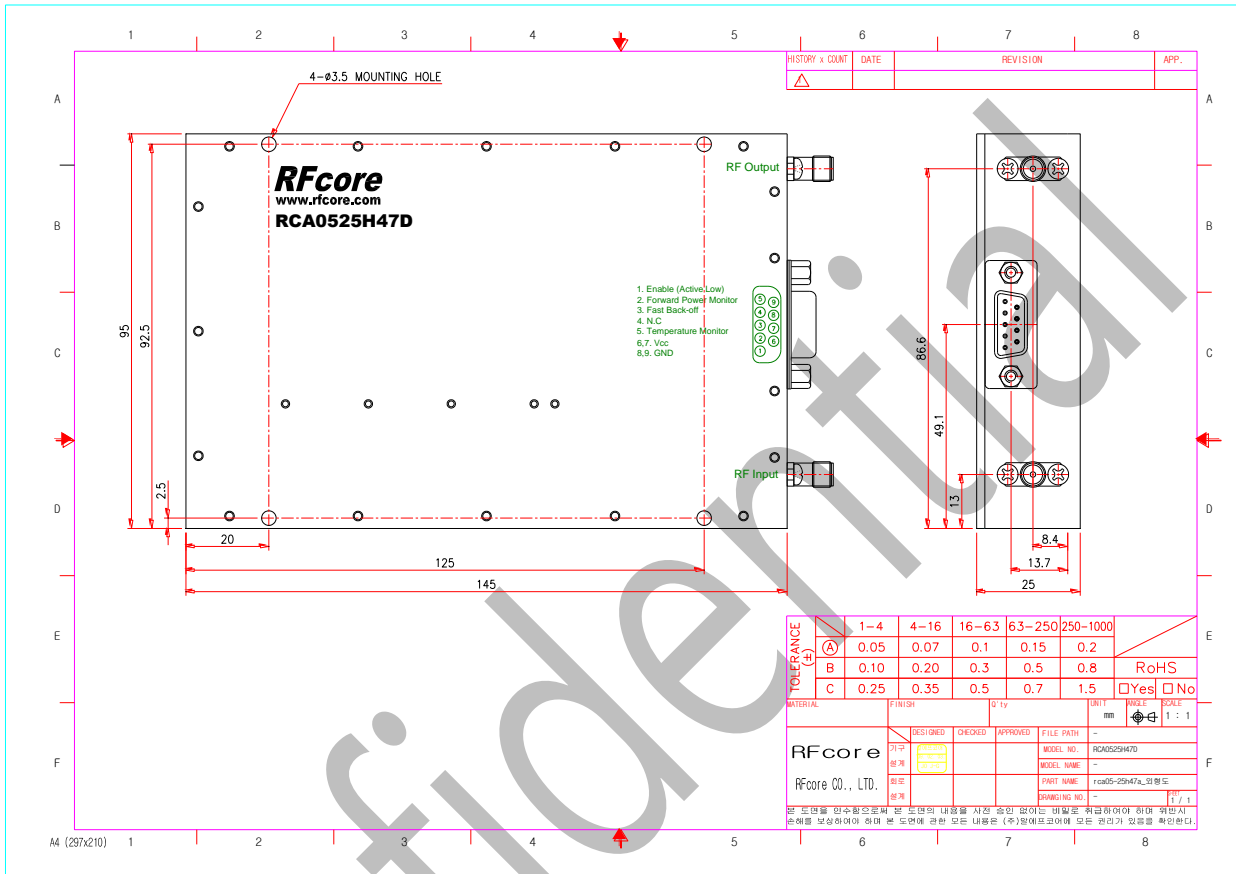
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## MECHANICAL DRAWING



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