

# Broadband High Power Amplifier

Product Name : RCA0525H44E, Code Name :

Doc. Name : General Spec.

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| <p style="text-align: center;"><b>General Specification</b><br/>for<br/><b>RCA0525H44E</b></p> |
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| Created                              | Printed   | Document Number | Revision | Manufacturer          |
|--------------------------------------|-----------|-----------------|----------|-----------------------|
| 2012/7/17                            | 2017/1/12 |                 | B        | <b>RFcore co.,Ltd</b> |
| File : RCA0525H44E General Spec.docx |           |                 |          |                       |

*The Specifications is subject to change before finalization*

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| ELECTRICAL SPECIFICATIONS         |                   | @ 50 Ohms load, 27 Vdc, Tc ≅ 35 °C |
|-----------------------------------|-------------------|------------------------------------|
| Parameter                         | Specification     | Remark                             |
| Frequency Range                   | 500 ~ 2500 MHz    |                                    |
| Saturated Output Power            | 44 dBm min.       | @ CW                               |
| Gain                              | 48 dB min.        | Input Level = - 15 dBm             |
| Small Signal Gain Flatness        | Peak to Peak 6 dB | Input Level = - 15 dBm             |
| Maximum Input Power for no damage | 5 dBm             |                                    |
| Input VSWR                        | Less than 2.0 : 1 |                                    |
| DC Input Voltage                  | 27 ± 1 Vdc        |                                    |
| Current Consumption               | 3.5 A max.        | @ 25W Pout                         |

| Interface Pin Description      |                            |  |
|--------------------------------|----------------------------|--|
| Connector                      | Description                | Specification  |
| I/O Interface(D-Sub 9Pin Male) | 1. Enable(Active Low)      | Pulled-up @ 5V with 10kohm   |
|                                | 2. Forward Power Monitor   | log scale detector.  |
|                                | 3. Fast Back-off           | External Voltage ≈ 2.3 V, (back - off by 10~17dB), 0V(normal gain) |
|                                | 4. Reflected Power Monitor | log scale detector.  |
|                                | 5. Temperature Monitor     | VT = 0.01*Tc + 0.5 (V)   |
|                                | 6. Vcc                     |  |
|                                | 7. Vcc                     |  |
|                                | 8. GND                     |  |
|                                | 9. GND                     |  |

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

|                                      |           |                 |          |                |
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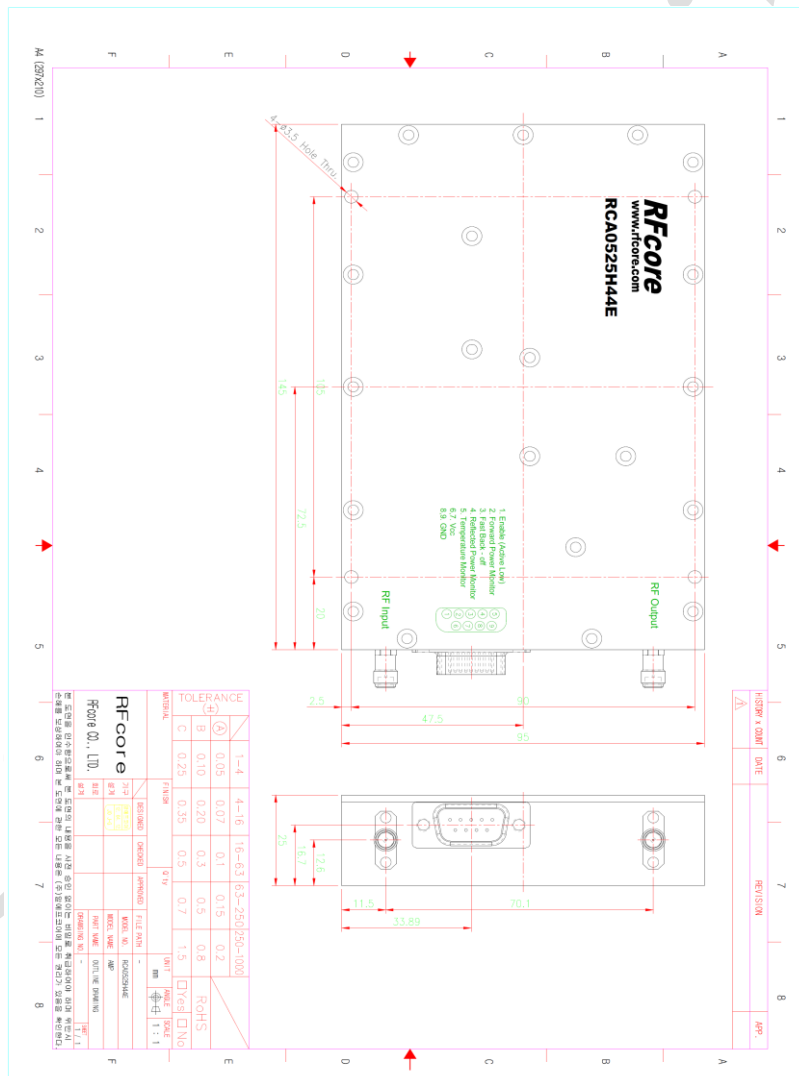
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## MECHANICAL SPECIFICATIONS

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

## MECHANICAL DRAWING



|                                      |           |                 |          |                       |
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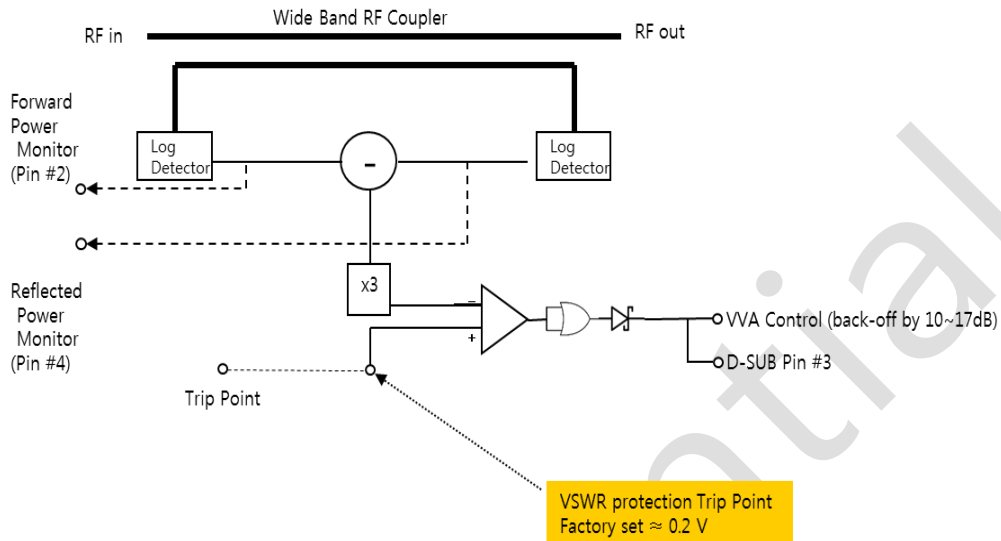
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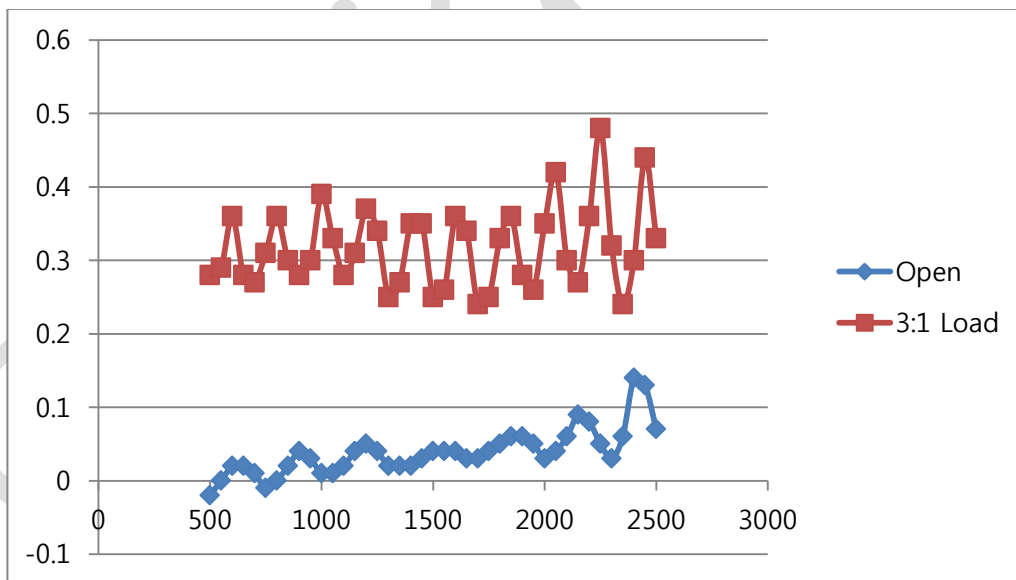
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## - VSWR Protection Behavior



## - Load Test (open & 3:1)

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