

# Broadband High Power Amplifier

Product Name : RCA4450H44C1, Code Name :

Doc. Name : General Spec.

---

|   |
|---|
| <p style="text-align: center;"><b>General Specification</b><br/>for<br/><b>RCA4450H44C1</b></p> |
|---|

1

|   |
|---|
| <p style="text-align: center;"><b>RESTRICTION ON USE, DUPLICATION, OR DISCLOSURE OF PROPRIETARY INFORMATION</b></p> |
|---|

This document contains proprietary information, which is the sole property of RFcore co., LTD.

The document is submitted to the recipient for his use only.

By receiving this document the recipient undertakes not to duplicate the documents or to disclose in part of, or the whole of, any of the information contained herein to any third party without receiving before hand, written permission from the submitting company.

| Created                               | Printed   | Document Number | Revision | Manufacturer          |
|---------------------------------------|-----------|-----------------|----------|-----------------------|
| 2018/4/23                             | 2018/11/9 |                 | D        | <b>RFcore co.,Ltd</b> |
| File : RCA4450H44C1 General 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>

# Broadband High Power Amplifier

Product Name : RCA4450H44C1, Code Name :

Doc. Name : General Spec.

| ELECTRICAL SPECIFICATIONS                |                          | @ 50 Ohms load, 28 Vdc, Tc = 35 °C  |
|--|--------------------------|-------------------------------------|
| Parameter                                | Specification            | Remark                              |
| Frequency Range                          | 4400 ~ 5000 MHz          |                                     |
| Saturated Output Power                   | 43 dBm min.              |                                     |
| Small Signal Gain                        | 45 dB min.               | Pin = -15 dBm                       |
| Small Signal Gain Flatness               | ± 1.5 dB                 | Pin = -15 dBm                       |
| Maximum Input Power for no damage        | 7 dBm                    |                                     |
| Input VSWR                               | Less than 1.8 : 1        |                                     |
| Output VSWR                              | Less than 1.8 : 1        | Built in Isolator (Isoaltion>16 dB) |
| Maximum load VSWR for amplifier survival | Infinite, all phase      | @ Pout = 40 dBm CW, Tc = 70°C       |
| DC Input Voltage                         | 28 ± 1 Vdc               |                                     |
| Current Consumption                      | 3.5 A typ.<br>4.0 A max. | @ Pout = 43 dBm CW                  |
| RF Input Format                          | CW                       |                                     |

2

| I/O Interface |                     |   |
|---------------|---------------------|---|
| Pin No.       | Description         | Specification   |
| 1             | Enable(Active Low)  | (Enable = 0V, Disable = 5V)<br>pull-up @ 5V with 10k ohm      |
| 2,3,4         | N.C                 | Do not connect  |
| 5             | Temperature Monitor | VT= 10(mV) * Tc(°C) + 500(mV),<br>Tc = Case Temperature ± 5°C |
| 6,7           | Vcc                 |   |
| 8,9           | GND                 |   |

| Created                               | Printed   | Document Number | Revision | Manufacturer          |
|---------------------------------------|-----------|-----------------|----------|-----------------------|
| 2018/4/23                             | 2018/11/9 |                 | D        | <b>RFcore co.,Ltd</b> |
| File : RCA4450H44C1 General Spec.docx |           |                 |          |                       |

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

http://www.rfcore.com

# Broadband High Power Amplifier

Product Name : RCA4450H44C1, Code Name :

Doc. Name : General Spec.

## ENVIRONMENTAL SPECIFICATIONS

| Parameter                       | Specification | Remark  |
|---------------------------------|---------------|---|
| Operating Case Temperature (Tc) | -20 ~ 70 °C   | At a hottest point of the mechanical case of amplifier module |
| Storage Temperature (Ts)        | -40 ~ 85 °C   |   |

## MECHANICAL SPECIFICATIONS

| Parameter                   | Specification               | Remark         |
|-----------------------------|-----------------------------|----------------|
| Dimension                   | 156 * 85 * 20 mm            | w/o connectors |
| Weight                      | Less than 450 g             |                |
| RF Input / Output Connector | SMA Female                  |                |
| I/O Interface Connector     | D-Sub 9Pin Male             |                |
| Cooling                     | Adequate Heat-sink required |                |

| Created                               | Printed   | Document Number | Revision | Manufacturer          |
|---------------------------------------|-----------|-----------------|----------|-----------------------|
| 2018/4/23                             | 2018/11/9 |                 | D        | <b>RFcore co.,Ltd</b> |
| File : RCA4450H44C1 General Spec.docx |           |                 |          |                       |

*The Specifications is subject to change before finalization*

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

Email: sales@rfcore.com

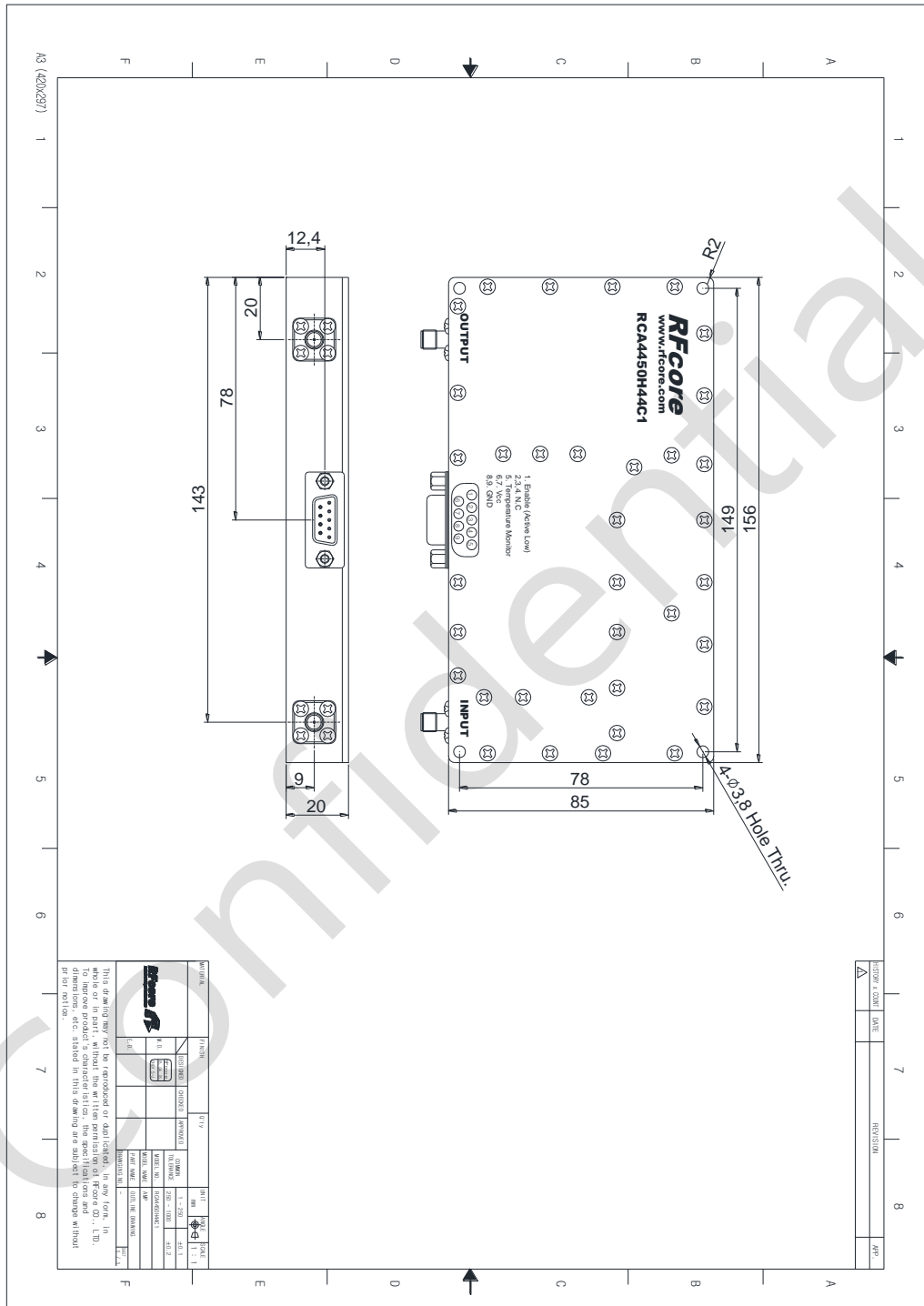
<http://www.rfcore.com>

# Broadband High Power Amplifier

Product Name : RCA4450H44C1, Code Name :

Doc. Name : General Spec.

## MECHANICAL DRAWING



DRAWING REFERNECE: This is subject to change without notice.

|                                       |           |                 |          |                       |
|---------------------------------------|-----------|-----------------|----------|-----------------------|
| Created                               | Printed   | Document Number | Revision | Manufacturer          |
| 2018/4/23                             | 2018/11/9 |                 | D        | <b>RFcore co.,Ltd</b> |
| File : RCA4450H44C1 General Spec.docx |           |                 |          |                       |

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

http://www.rfcore.com