

Band-Specific High Power Amplifier

Product Name : RCA1800H50CW , Code Name : C2Y6SD3OI45

Doc. Name : General Spec.

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| <p style="text-align: center;">General Specification for RCA1800H50CW</p> |
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| Created | Printed | Document Number | Revision | Manufacturer |
|---------------------------------------|----------|-----------------|----------|-----------------------|
| 2011/1/14 | 2017/2/6 | | B | RFcore co.,Ltd |
| File : RCA1800H50CW General Spec.docx | | | | |

The Specifications is subject to change before finalization

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

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Band-Specific High Power Amplifier

Product Name : RCA1800H50CW , Code Name : C2Y6SD30I45

Doc. Name : General Spec.

| ELECTRICAL SPECIFICATIONS | | @ 50 Ohms load, 27 Vdc, Tc = 35 °C |
|--------------------------------------|----------------------------|---|
| Parameter | Specification | Remark |
| Frequency Range | 1805 ~ 1880 MHz | |
| Output Power @ P1dB | 100W min. | |
| Small Signal Gain @ Center Frequency | 45 ± 0.5 dB | Input = -15dBm |
| Gain Flatness | Peak to Peak 2 dB | Input = -15dBm |
| Gain Stability | ± 1.0 dB | Operating temp. |
| Maximum Input Power | 10 dBm max | |
| Input / Output VSWR | Less than 1.5 : 1 | |
| DC Input Current | 12 A max. 10 A typ. | @ Pout = 100W |
| DC Input Voltage | +27 ± 1.0 Vdc | |
| RF Input Signal Format | CW | |
| I/O Map | 1. GND | |
| | 2. Over Power Alarm | Alarm & Shutdown : High(5V) @ peak power 54 dBm ± 1 dB |
| | 3. VSWR Fail Alarm | Alarm : reflected power = 25~50W @ Fcenter |
| | 4. Temperature Monitor | $V_T \approx 3.6 - 0.022 \cdot (T - 30) \pm 0.1V$, T is Case Temperature in °C |
| | 5. Over Temp Alarm | Alarm & Shutdown : High(5V) @ case temp. 85 ± 5°C Auto Restart : LOW(0V) @ case temp. 65 ± 5°C |
| | 6. Enable (Active Low) | pulled-up@5V with 10KΩ |
| | 7. Do not connect | |
| | 8. Forward Power Monitor | 4V±0.1V@50dBm, Log slope ≈ 0.1V/dB Vpin8 = 4-(50-Pout)x0.1±0.1V |
| | 9. Reflected Power Monitor | Vpin9 is output(voltage) of diode detector. It has non-log slope characteristic. PA shutdown when Vpin9 reach 1.4 ± 0.1Vdc @ Fcenter |

* Temp. Monitor(Vpin4) is not a specification. It is for reference value only.

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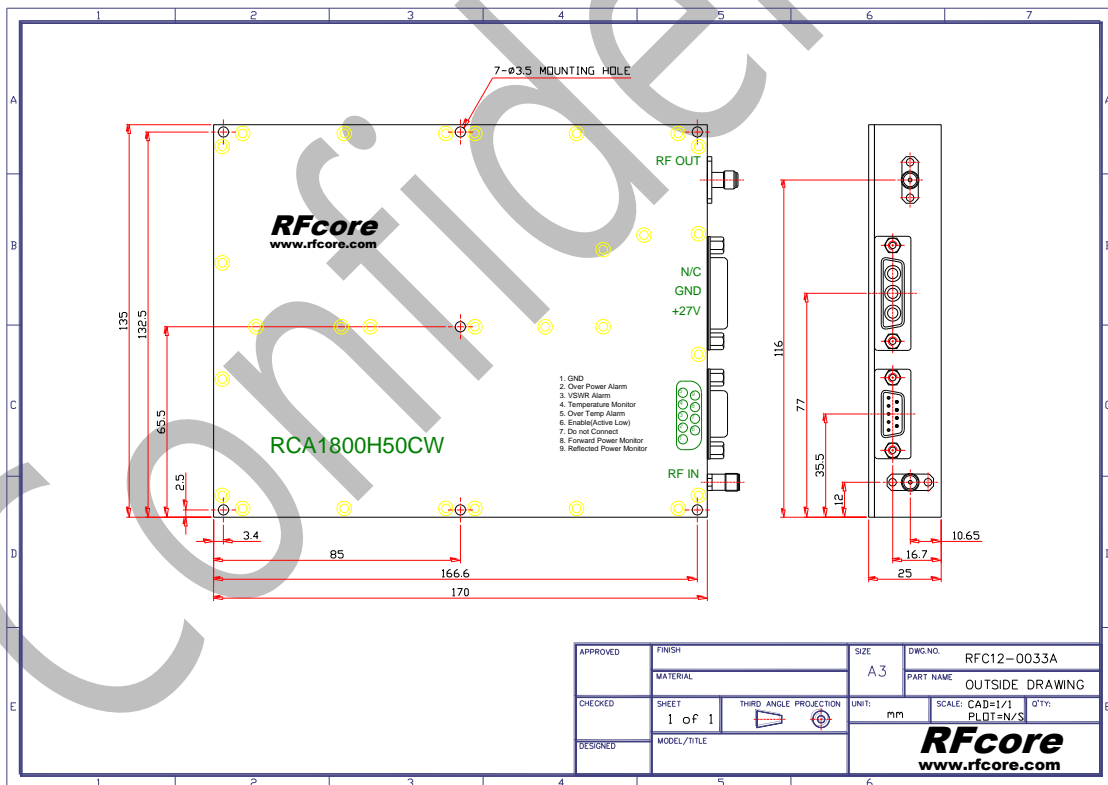
ENVIRONMENTAL SPECIFICATIONS

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

MECHANICAL SPECIFICATIONS

| Parameter | Specification | Remark |
|-----------------------------|--|--------|
| Dimension | 170 x 135 x 25 mm | |
| RF Input / Output Connector | Input : SMA – Female Output : SMA -Female | |
| DC & Interface Connector | D – Sub 9 Pin Male | |

MECHANICAL DRAWING



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