

Band-Specific High Power Amplifier

Product Name : RCA1800H50CW , Code Name : C2Y6SD3OI45

Doc. Name : General Spec.

<p style="text-align: center;">General Specification for RCA1800H50CW</p>

1

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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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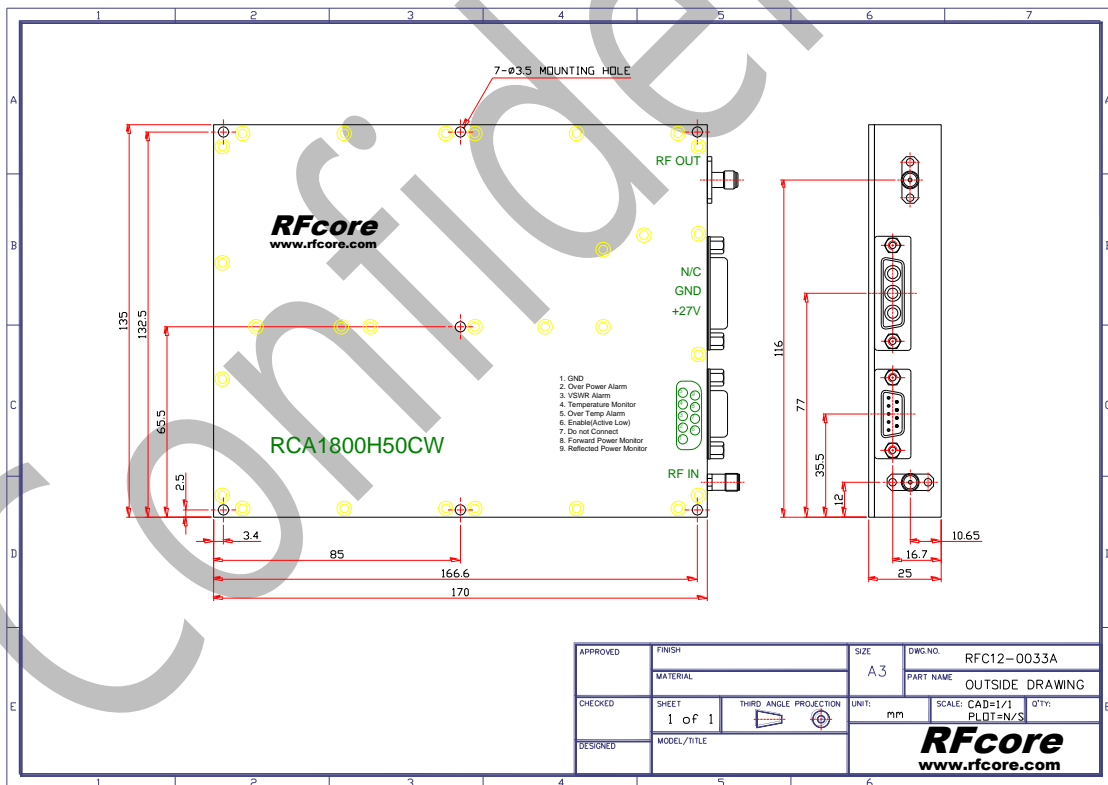
ENVIRONMENTAL SPECIFICATIONS

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



3

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