

# Band-Specific High Power Amplifier

Product Name : RCA18-20H50E , Code Name : C2Y6ND3OI47

Doc. Name : General Spec.

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<p style="text-align: center;"><b>General Specification</b> for <b>RCA18-20H50E</b></p>
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2010/8/13	2017/2/6		A	<b>RFcore co.,Ltd</b>
File : RCA18-20H50E General Spec.docx				

*The Specifications is subject to change before finalization*

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# Band-Specific High Power Amplifier

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 27 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	1800 ~ 2000 MHz	
Saturated Output Power	50 dBm min.	
Small Signal Gain @ Center Frequency	47 ± 0.5 dB	Input = -15dBm , Operating temp.
Gain Flatness	Peak to Peak 3.5 dB	Input = -15dBm, Over Freq Band & Temp
Gain Stability	± 1.0 dB	Operating temp.
Maximum Input Power	10 dBm max	
Input / Output VSWR	Less than 1.5 : 1	
DC Input Current	13 A max. 10 A typ.	@ Pout = 100W
DC Input Voltage	+27 ± 1.0 Vdc	
RF Input Signal Format	CW	
I/O Map	1. GND 2,7. Do not connect 3. VSWR Fail Alarm 4. Temperature Monitor 5. Over Temp Alarm 6. Enable (Active low) 8. Forward Power Monitor 9. Reflected Power Monitor	Alarm : reflected power = 25~ 50W @ Fcenter VT= 3.6 - 0.022 x ( T-30) T = Case Temperature ± 5°C Alarm & Shutdown : High(5V) @ case temp. 85 ± 5°C Auto Restart : LOW(0V) @ case temp. 65 ± 5°C pulled-up@5V with 10KΩ @ CW 50dBm, slope : 0.1V/dB Vpin8 = 4-(50-Pout)x0.1±0.1V Vpin9 is Diode type Detector. Diode has non-linear log slope characteristic. PA shutdown when Vpin9 reach 1.4 ± 0.1Vdc @ Fcenter

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

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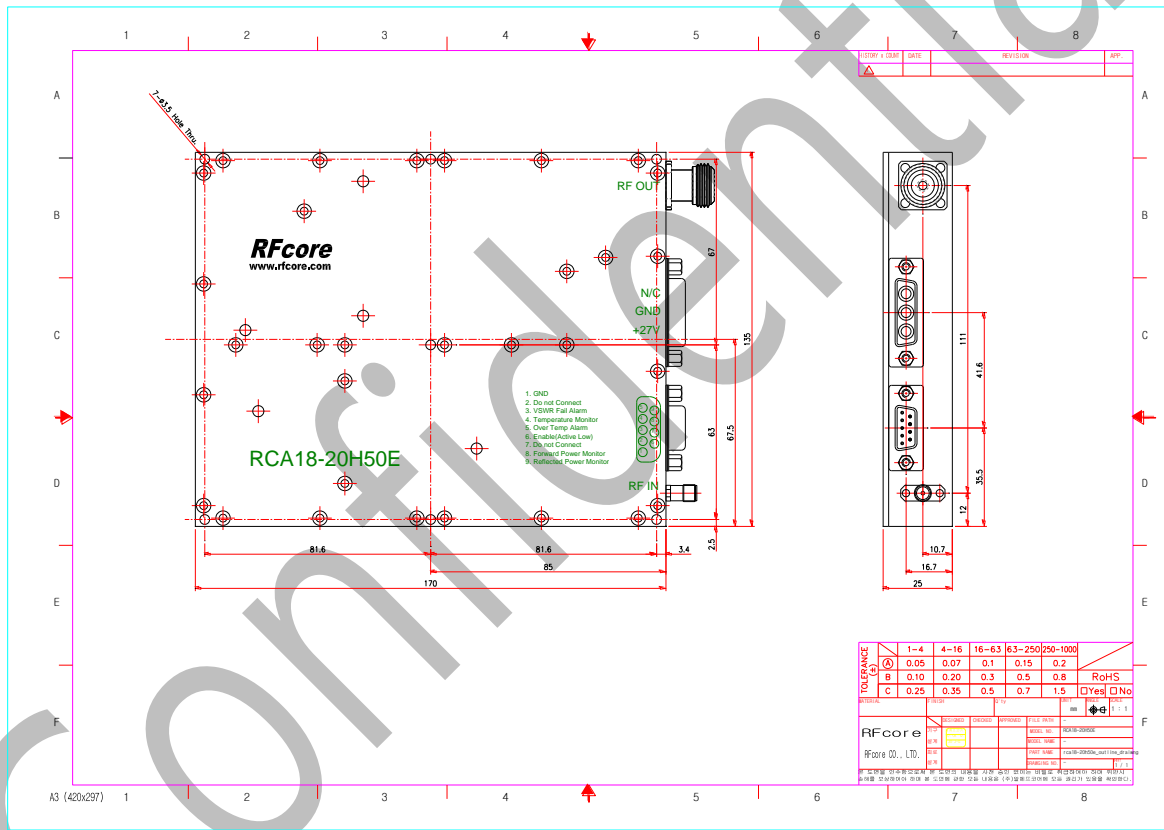
Product Name : RCA18-20H50E , Code Name : C2Y6ND30I47

Doc. Name : General Spec.

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	170 x 135 x 25 mm	
RF Input / Output Connector	Input : SMA – Female Output : N -Female	
DC Connector	3W3P(A1: +28V, A2: GND, A3: N.C)	
Interface Connector	D-Sub 9Pin Male	
Cooling	Adequate Heat-sink required	

## MECHANICAL DRAWING



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