

# Band-Specific High Power Amplifier

Product Name : RCA900H50A, Code Name : C1Y3SD3AI47

Doc. Name : General Spec.

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<p style="text-align: center;"><b>General Specification</b> for <b>RCA900H50A</b></p>
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Created	Printed	Document Number	Revision	Manufacturer
2011/1/14	2017/1/12		D	<b>RFcore co.,Ltd</b>
File : RCA900H50A General Spec.docx				

*The Specifications is subject to change before finalization*

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

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<http://www.rfcore.com>

## Band-Specific High Power Amplifier

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 27 Vdc, Tc ≅ 35 °C
Parameter	Specification	Remark
Frequency Range	925 ~ 960 MHz	
Saturated Output Power	100 Watts min.	CW operation
Small Signal Gain @ Center Frequency (942.5MHz)	47 ± 0.5 dB	Input Level = - 15 dBm,
Gain Flatness	Peak to Peak 2.5 dB	Input Level = - 15 dBm
Gain Stability	± 1 dB	Operating Temp.
Maximum Input Power.	7 dBm max	
Input/Output VSWR	2 : 1 max	
DC Input Voltage	27 ± 1 Vdc	
Current Consumption	14 A max, 12A typ.	@ Pout = 100 W
I/O Map(D-Sub 9Pin Male)	1. GND	
	2. Do not connect	
	3. VSWR Fail Alarm	Alarm = TTL High(5V) @ Over Reflected power 20W(Current setting is 25~50W)
	4*. Temperature Monitor	VT ≅ 3.6-0.022*(T-30) ± 0.1V , T is Case Temperature in °C
	5. Over Temp. Alarm	Alarm & Shutdown when Case Temp. arrive at 85±5°C
	6. Enable(Active Low)	Disable = TTL High(5V), Enable = TTL Low(0V)
	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. 1.4V±0.1V@43dBm reflection

\* The output voltage of Temp. Monitor(Vpin4) is not a specification. It is a reference value.

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### ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Case Temperature	-20 ~ +60 °C	
Storage Temperature	-40 ~ +85 °C	

### MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	190 * 150 * 25 mm	
Input / Output Connector	Input : SMA Female(2H), Output : SMA Female(4H)	
DC Connector	3W3P(A1: +27V, A2: GND, A3: N.C)	
Control Connector	D-Sub 9Pin Male	
Cooling	Adequate Heat-sink required	

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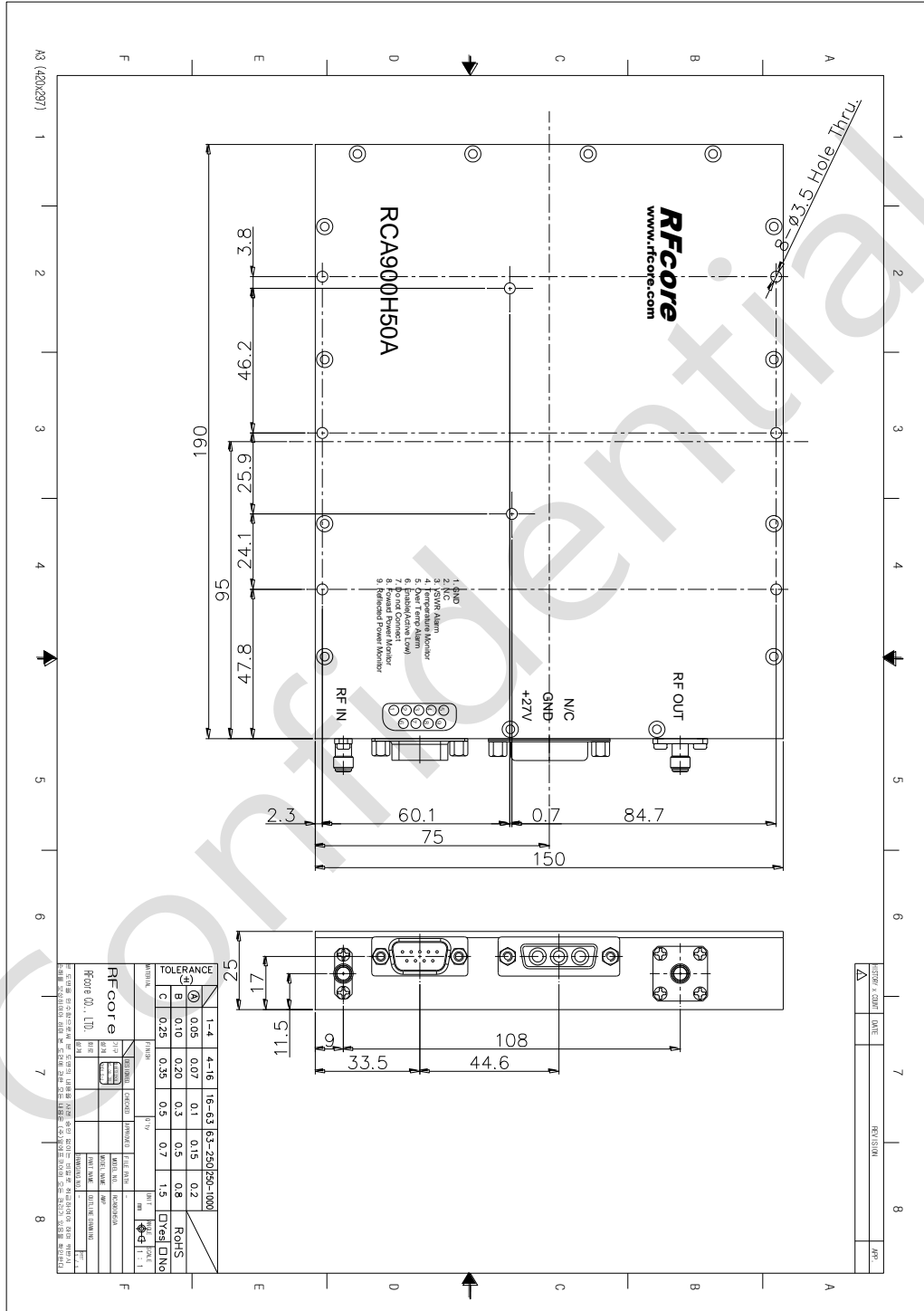
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## MECHANICAL DRAWING



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