

Band-Specific High Power Amplifier

Product Name : RCA08-10H50E , Code Name : C1Y3SD30I47

Doc. Name : General Spec.

General Specification for RCA08-10H50E

1

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2014/2/4	2017/1/12		C	RFcore co.,Ltd
File : RCA08-10H50E General Spec.docx				

The Specifications is subject to change before finalization

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 27 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	800 ~ 1000 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 4 dB	Input = -15dBm, Over Freq Band & Temp
Gain Stability	± 1.0 dB	Operating temp.
Maximum Input Power for no damage	7 dBm max	
Input / Output VSWR	Less than 1.5 : 1	
DC Input Current	14 A max. 12 A typ.	@ Pout = 100W Tcase = 35°C
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	Alarm : reflected power = 25~ 50W @ Fcenter
	4. Temperature Monitor	VT= 3.6 - 0.022 x (T-30) T = Case Temperature ± 5°C
	5. Over Temp Alarm	Alarm : High(5V) @ case temp. 85 ± 5°C
	6. Enable (Active low)	pulled-up@5V with 10KΩ
	8. Forward Power Monitor	4 ± 0.1V @ CW 50dBm, slope : 0.1V/dB Vpin8 = 4-(50-Pout)x0.1±0.1V
	9. Reflected Power Monitor	Vpin9 is the output of diode detector. it has non- log slope characteristic. PA shutdown when Vpin9 reach 1.4 ± 0.1Vdc @ Fcenter

2

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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	190 x 150 x 25 mm	
RF Input / Output Connector	Input : SMA female(2H) Output : SMA female(4H)	
DC Connector	3W3P(A1: +28V, A2: GND, A3: N.C)	
Interface Connector	D-Sub 9Pin Male	
Cooling	Adequate Heat-sink required	

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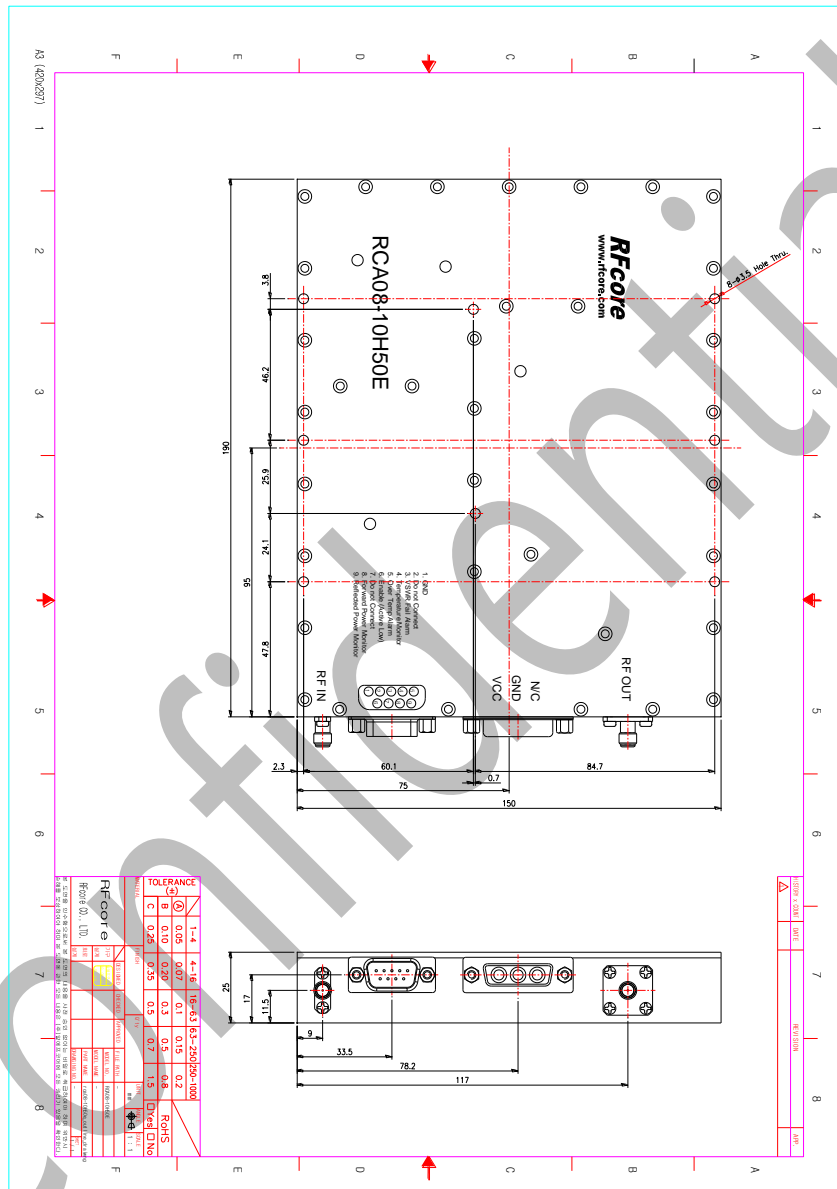
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MECHANICAL DRAWING



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