

Broadband High Power Amplifier

Product Name : RCA1820H53S

Doc. Name : Preliminary Short Spec.

<p style="text-align: center;">Preliminary Short Specification for RCA1820H53S</p>
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Created	Printed	Document Number	Revision	Manufacturer
2014/5/13	2016/4/21		B	RFcore co.,Ltd
File : RCA1820H53S Short Spec_revB.docx				

The Specifications is subject to change before finalization

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ELECTRICAL SPECIFICATIONS		@ 50 Ω load, Tcase = 35°C, 28Vdc
Parameter	Specification	Remark
Frequency Range	1800 ~ 2000 MHz	
Saturated Output Power	200 W min.	
Small Signal Gain @ Center Frequency	55 ± 1.0 dB	Input = -15 dBm
Gain Flatness	Peak to Peak 5 dB	Input = -15 dBm, Over Freq. Band
Maximum Input Power	5 dBm max	
Input / Output VSWR	Less than 2 : 1	
RF Input Signal Format	CW	
Current Consumption	22 A max.	
DC Input Voltage	28 ± 1.0 Vdc	

Interface Pin Description		
Connector	Description	Specification
DC Connector(3W3P)	A1: Vcc	
	A2. GND	
	A3. Do not connect	
I/O Interface(D-Sub 9Pin Male)	1. Do not connect	
	2. Temperature Monitor	$V_T = \{0.02(V/^{\circ}C) * T(^{\circ}C) + 1.0V\} \pm 0.1V$ T=Case Temperature ± 5°C
	3. Enable (Active low)	pulled-up@5V with 20KΩ
	4. Do not connect	
	5. VSWR Fail Alarm	Alarm : High(5V)
	6. GND	
	7. Forward Power Monitor	4±0.3V @ CW 53dBm, slope : 0.1V/dB $V_{pin7} = 4 - (53 - P_{out}) \times 0.1 \pm 0.3V$
	8. Do not connect	
	9. Do not connect	

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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	250 * 170 *28 mm	
RF Input Connector	SMA Female	
RF Output Connector	N- Female	
DC Power Connector	3W3P(A1 : Vcc, A2 : GND, A3 : N.C)	
Control Connector	D – SUB 9Pin Male	
Cooling	Adequate Heat-sink required	

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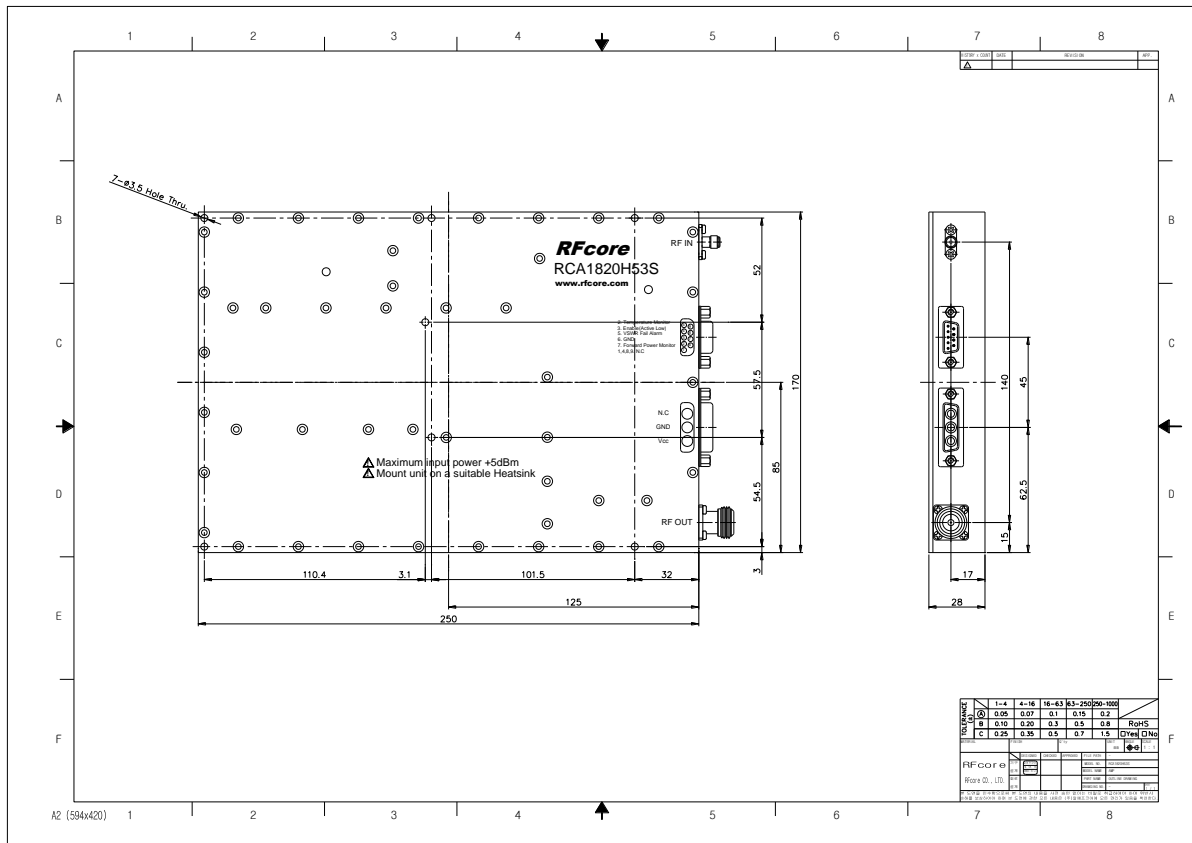
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MECHANICAL DRAWING



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