

Broadband High Power Amplifier

Product Name : RCA0105H54B, Code Name :

Doc. Name : General Spec.

<p style="text-align: center;">General Specification for RCA0105H54B</p>
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2014/9/11	2018/8/14			RFcore co.,Ltd
File : RCA0105H54B General Spec.docx				

The Specifications is subject to change before finalization

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

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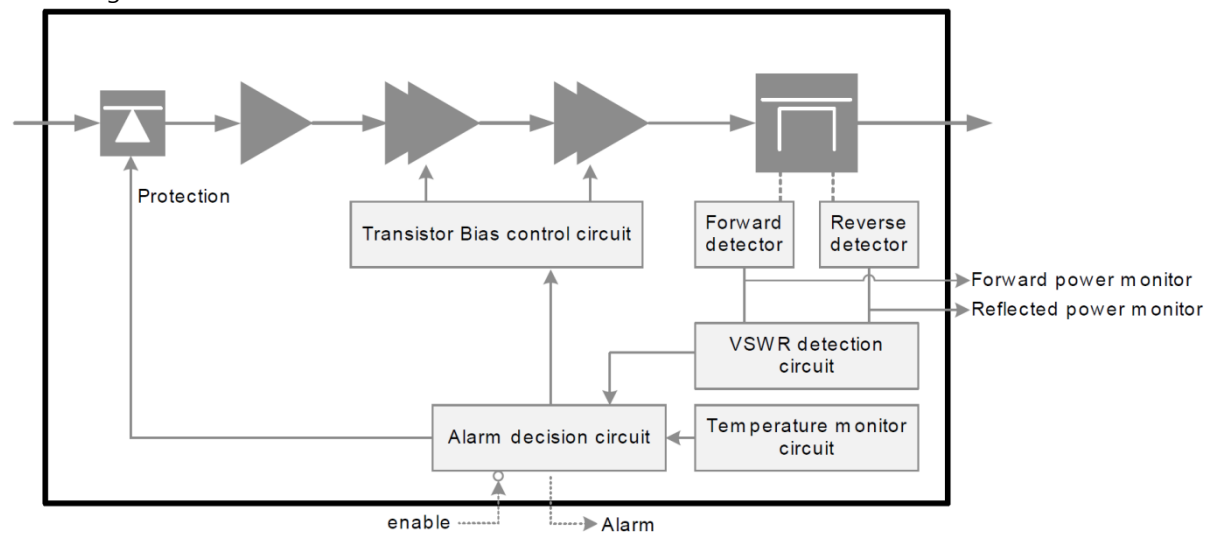
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SPECIFICATIONS		@ 50 Ohms load, 28Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	100 ~ 500 MHz	
Saturated Output Power	Typical 250W, MIN200W	@Pin=7dBm, CW
Output Power at 1dB Compression Point	>50dBm	@ CW
Nominal Gain	53 ± 1 dB	Over Temp.
@ Small Signal Flatness	± 2.5 dB	
@ Large Signal Flatness	± 2.0 dB	
Maximum Output load condition	5 : 1	Survival condition
In VSWR	< 1.5 : 1	
DC Input	28 ± 0.5 VDC	3W3P
TX Enable/Disable Time	5us Max.	
DC Current	<25A	@ Pout = 200W
Operation Temperature	-10 ~ +70 °C	@ Base Plate
Storage Temperature	-40 ~ +100 °C	

Block diagram



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I/O Interface		
Parameter	Specification	Remark
I/O Map (D-SUB)	1. Enable	Active TTL Low input
	2. Forward power monitor output	Logarithmic Detector(0.05V/dB)
	3. Do not connect	
	4. Reflect power monitor output	Logarithmic Detector(0.05V/dB)
	5. Do not connect	
	6. Active TTL Low output Over Temp Alarm	High 5V +85°C ± 10%
	7. Active TTL Low output Over Current Alarm	High 5V @ 25A ± 1A
	8. GND	
	9. GND	

Detector voltage = 0.05V/dB, detector flatness ≤ 3dB.

Detector stability : TBD (has temperature deviation)

*** Internal protection

VSWR fail protection operates when output is connected VSWR >5:1 load :

-Typical 10dB back-off

Over temp protection:

-The PA is disable state when temperature becomes around 85°C, then, The PA is enable state when it becomes around 65°C.

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	340 X 170 X 30 mm	
RF Input Connector	SMA – Female	
RF Output Connector	N – Female	
DC & Interface Connector	3W3P / D-Sub 9Pin Male	
Cooling	Adequate Heat-sink required	

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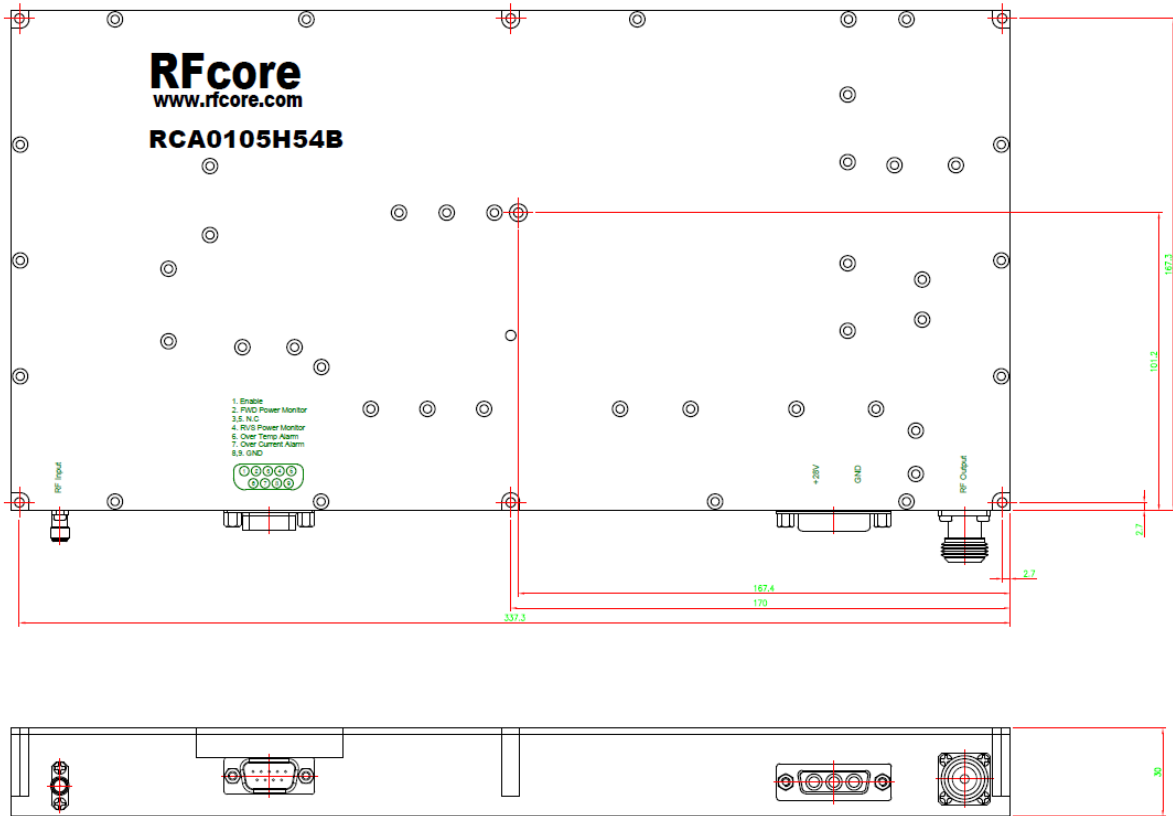
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MECHANICAL DRAWING



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