

Broadband High Power Amplifier

Product Name: RCA1030H47D, Code Name: C10Y6ND9EN50:

Doc. Name : Preliminary Short Spec.

<p style="text-align: center;">Preliminary Short Specification for RCA1030H47D</p>
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Created	Printed	Document Number	Revision	Manufacturer
2013/9/2	2017/1/17		B	RFcore co.,Ltd
File : RCA1030H47D Short 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>

Broadband High Power Amplifier

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	1000 ~ 3000 MHz	B1 : 1000 ~ 2200 MHz B2 : 2200 ~ 3000 MHz
Saturated Output Power @ B1	47 dBm min.	@ CW
Saturated Output Power @ B2	44 dBm min.	@ CW
Gain @ B1	50 dB min.	Input Level = - 15 dBm
Gain over whole of frequency	46 dB min.	Input Level = - 15 dBm
Gain Flatness @ B1	Peak to Peak 3.0 dB	Input Level = - 15 dBm
Gain Flatness over frequency	Peak to Peak 7.0 dB	Input Level = - 15 dBm
Input VSWR	Less than 1.5 : 1	
Maximum load VSWR for amplifier working	3.5 : 1	Works with degraded performance.
Maximum load VSWR for amplifier survival	Infinite, all phase	If the alarm is generated, the gain of the amplifier is automatically reduced to protect itself.
ON/OFF Switching time	Less than 1 msec	
DC Input Voltage	28 ± 1 Vdc	
Current Consumption @ B1	6.5 A typ., 7.5 A max.	@ Pout = 47dBm
Current Consumption over frequency	4.5 A typ., 5.5 A max.	@ Pout = 44dBm

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Interface Pin Description		
Connector	Description	Specification
I/O Interface(D-Sub 9Pin Male)	1. Enable (Active low)	Pulled-up @ 5V with 10kohm
	2. Forward Power Monitor	Logarithmic Detector(0.05V/dB)
	3. VSWR Fail Alarm	TTL HIGH(5V) @ high VSWR VSWR alarm will be generated a certain ratio between 4 and infinite VSWR. The alarm is not latched.
	4. Reflected Power Monitor	Logarithmic Detector(0.05V/dB)
	5. Temperature Monitor	VT= 10(mV) * Tc(°C) + 500(mV), Tc = Case Temperature ± 5°C
	6. VCC	
	7. VCC	
	8. GND	
	9. GND	

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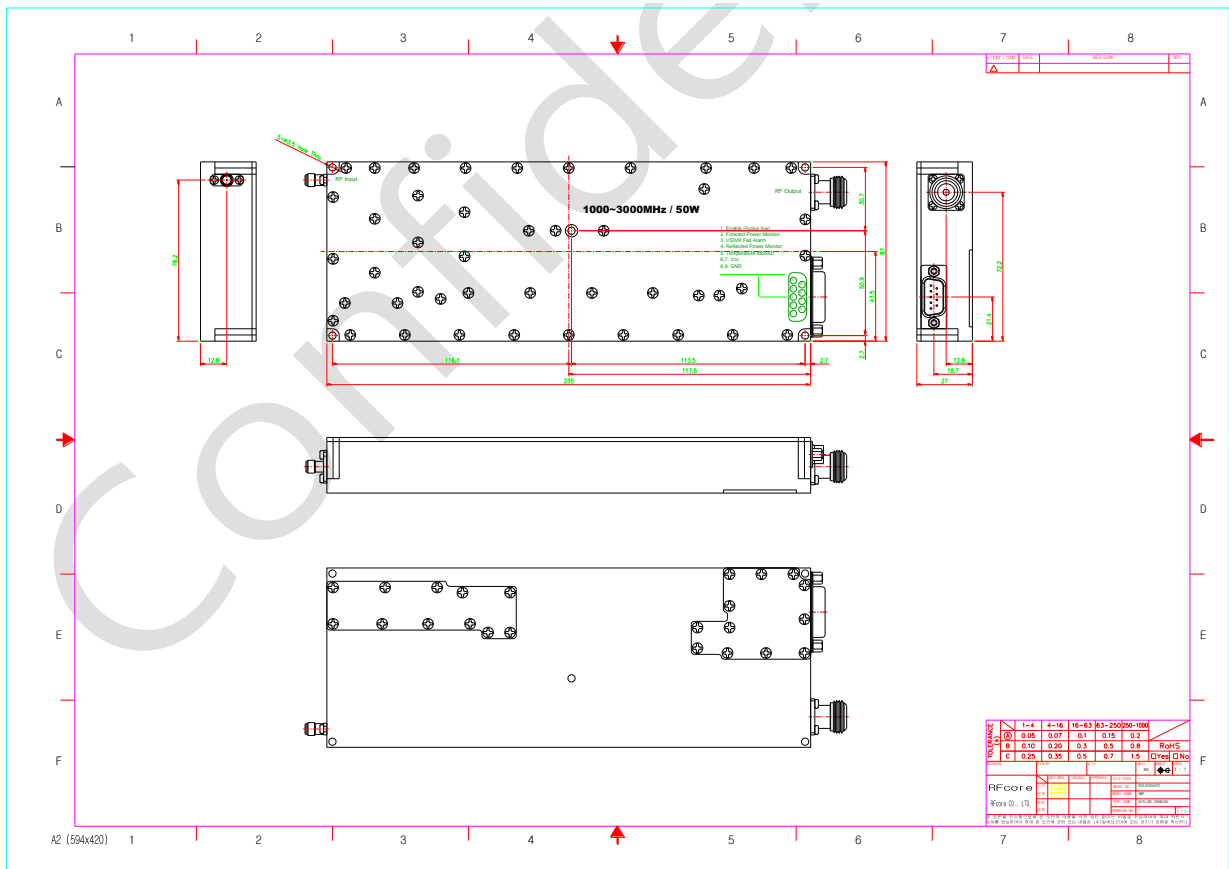
ENVIRONMENTAL SPECIFICATIONS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	235 * 87 * 27 mm	
Weight	Less than 1100 g	
RF Input Connector	SMA Female	
RF Output Connector	N Female	
DC & I/O Interface Connector	D-sub 9pin Male	
Cooling	Adequate Heat-sink required	

MECHANICAL DRAWING



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