

# Broadband High Power Amplifier

Product Name : RCA2030H44E1, Code Name :

Doc. Name : General Spec.

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<p style="text-align: center;"><b>General Specification</b> for <b>RCA2030H44E1</b></p>
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1

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Created	Printed	Document Number	Revision	Manufacturer
2018/2/26	2018/2/26		B	<b>RFcore co.,Ltd</b>
File : RCA2030H44E1 General Spec.docx				

*The Specifications is subject to change before finalization*

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<http://www.rfcore.com>

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	2000 ~ 3000 MHz	
Saturated Output Power	44 dBm min.	@ CW, 50 ohms load
Small Signal Gain	44 dB min.	Input Level = - 15 dBm
Small Signal Gain Flatness	Peak to Peak 4 dB	Input Level = - 15 dBm
Maximum Input Power for no damage	7 dBm	
Input VSWR	Less than 2.0 : 1	
Maximum load VSWR for amplifier working	3.5 : 1	Works with degraded performance.
Maximum load VSWR for amplifier survival	Infinite, all phase	If VSWR fail alarm is activated, the gain of the amplifier will be reduced to protect itself.
Enable/Disable Switching Time	2 usec typ.	
DC Input Voltage	28 ± 1 Vdc	
Current Consumption	2.8 A typ. 3.5 A max.	@ Pout = 44 dBm CW
RF Input Signal Format	CW	

2

Interface Pin Description		
Connector	Description	Specification
I/O Interface(D-Sub 9Pin Male)	1. Enable(Active Low)	(Enable = 0V, Disable = 5V) pull-up @ 5V with 10k ohm
	2. Forward Power Monitor	Logarithmic Detector(0.05V/dB)
	3. VSWR Fail Alarm	TTL HIGH(5V) @ high VSWR VSWR alarm will be activated at a certain ratio between 3.5 and infinite VSWR. The alarm is not latched signal.
	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	-30 ~ +70 °C	At a hottest point of the mechanical case of amplifier module
Storage Temperature	-40 ~ +85 °C	

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	145 * 95 * 25 mm	w/o connectors
Weight	Less than 530 g	
RF Input Connector	SMA Female	
RF Output Connector	SMA Female	
I/O Interface Connector	D-Sub 9Pin Male	
Cooling	Adequate Heat-sink required	

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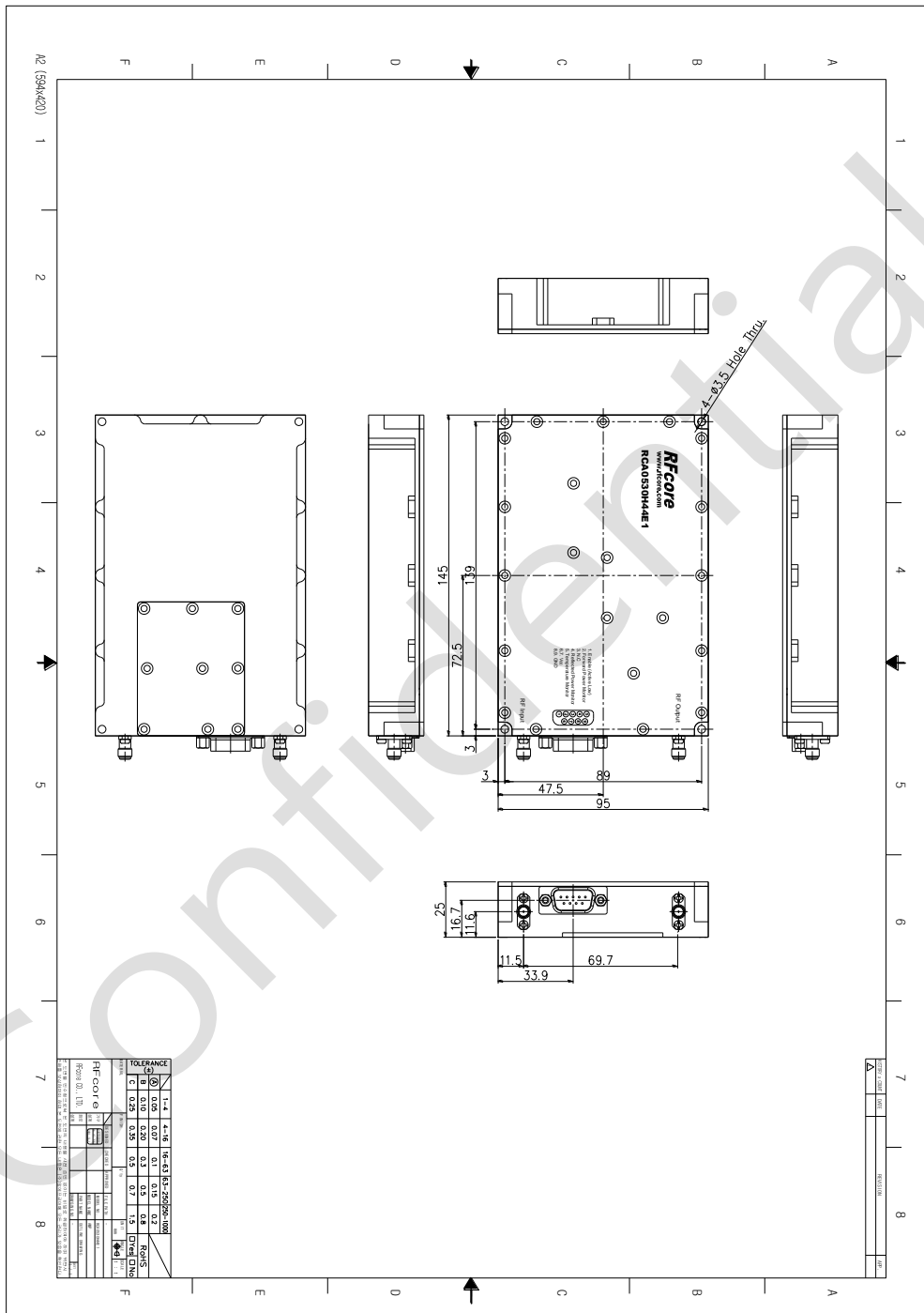
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## MECHANICAL DRAWING



DRAWING REFERNECE: This is subject to change without notice.

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