

Broadband High Power Amplifier

Product Name : RCA00205H44L, Code Name : B2Y6SD3UN43

Doc. Name : General Spec.

<p style="text-align: center;">General Specification for RCA00205H44L</p>

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Created	Printed	Document Number	Revision	Manufacturer
2018/10/18	2019/4/17		D	RFcore co.,Ltd
File : RCA00205H44L General 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>

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	20 ~ 500 MHz	
Saturated Output Power	44 dBm min.	@ CW, 50 ohms load condition
Output Power at 1dB Compression Point	41 dBm min.	@ CW, 50 ohms load condition
Gain	42 dB min.	Input Level = - 15 dBm
Large Signal Gain Flatness	Peak to Peak 4 dB	Input Level = 0 dBm
Small Signal Gain Flatness	Peak to Peak 6 dB	Input Level = - 15 dBm
Maximum Input Power for no damage on DC ON	10 dBm max	@ CW, 50 ohms load condition
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 VSWR fail alarm is activated, the gain of the amplifier would be reduced to protect itself.
Enable/Disable Switching Time	10 usec max.	
DC Input Voltage	28 ± 1 Vdc	
Current Consumption	3 A max. 2.5 A typ.	@ Pout 44dBm CW
RF Input Signal Format	CW	

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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($\approx 0.05V/dB$)
	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($\approx 0.05V/dB$)
	5. Temperature Monitor	$VT = 10(mV) * Tc(^{\circ}C) + 500(mV)$, $Tc = \text{Case Temperature} \pm 5^{\circ}C$
	6. Vcc	
	7. Vcc	
	8. GND	
	9. GND	

ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Case Temperature	-20 ~ +75 °C	At a hottest point of the mechanical case of amplifier module
Storage Temperature	-40 ~ +85 °C	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	80 * 95 * 26 mm	w/o connectors
Weight	Less than 380 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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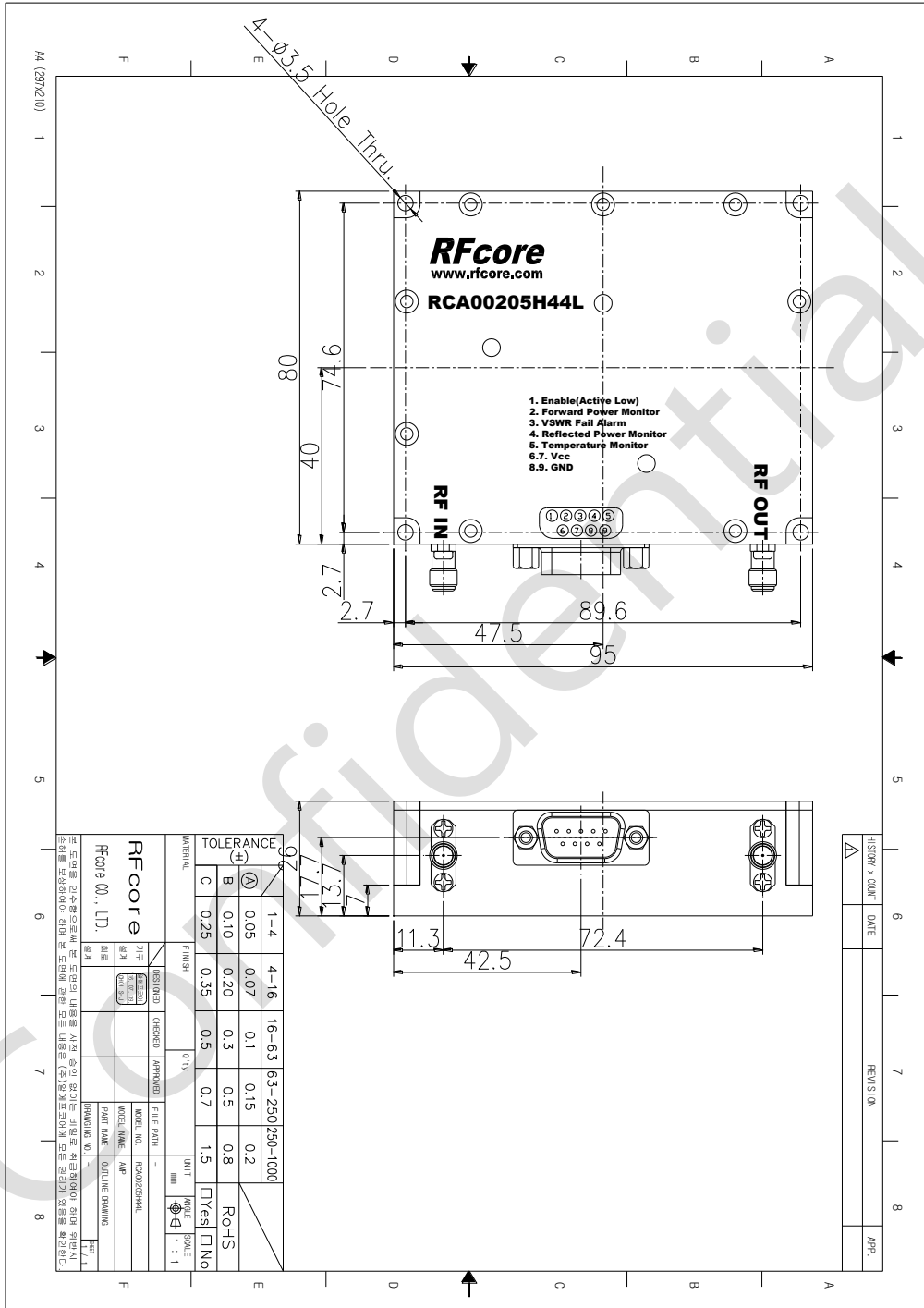
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MECHANICAL DRAWING



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