

Broadband High Power Amplifier

Product Name : RCA5159H49D1, Code Name :

Doc. Name : General Spec.

RoHs
compliant

General Specification for RCA5159H49D1

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Revision history

Revision Code	Author	Date	Engineering Change Order
A	Charlie CHO	22.Apr.2019	- Draft
B			

Created	Printed	Document Number	Revision	Manufacturer
2019/4/22	2019/4/22		A	RFcore co.,Ltd
File : RCA5159H49D1 General Spec.docx				

The Specifications is subject to change before finalization

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

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ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	5150 ~ 5875 MHz	
Saturated Output Power	80 W min.	@ CW, 50 ohms load condition
Large Signal Gain	48 dB min.	Input Level = 0 dBm
Gain Flatness	Peak to Peak 4 dB	Input Level = 0 dBm
Maximum Input Power for no damage on DC ON	Short term : 10 dBm (20msec) Long term : 5 dBm	@ CW, 50 ohms load condition
Input VSWR	Less than 2:1	
Output VSWR	2.5 : 1 typ.	Non-Isolator
Maximum handling load VSWR for amplifier survival	10 : 1	For 20mSec @ Pout of 80 W CW and Tc = 75 °C
Enable/Disable Switching Time	10 us max.	
DC Input Voltage	28 ± 1.0 Vdc	
Current Consumption	19 A max., 16 A typ.	@ Pout=80 W CW, 50 ohms load
RF Input Signal Format	CW	
I/O Interface (D-Sub 9Pin Male)	1. GND	
	2. N.C	Do not connect
	3. N.C	Do not connect
	4. Temperature Monitor	VT= 10(mV) * Tc(°C) + 500(mV), Tc = Case Temperature ± 5°C
	5. Over Temp Alarm	Alarm: TTL High@case temp. 85±5°C Auto Recovery : TTL Low@case temp. 65±5°C
	6. Enable (Active low)	Pulled-down with 10kohm Does not exceed 25mA Enable : TTL Low or Open Disable : TTL High(3.3-5V)
	7. Do not connect	
	8. Forward Power Monitor	2.4 ± 0.1 VDC@ Pout = 49 dBm Logarithmic Detector(≈0.05V/dB)
	9. Reflected Power Monitor	2.4 ± 0.1 VDC@ Pout = 49 dBm Logarithmic Detector(≈0.05V/dB)

2

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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	170 x 135 x 25 mm	w/o connectors
Weight	Less than 1.4 kg	
RF Input Connector	SMA Female	
RF Output Connector	SMA Female	
I/O Interface Connector	Filtered 3W3P (A1:VCC, A2:GND, A3:N.C)	Capacitor value : 3000 pF
Control Connector	Filtered D-Sub 9Pin Male	Capacitor Value : 4700 pF
Cooling	Adequate Heat-sink required	

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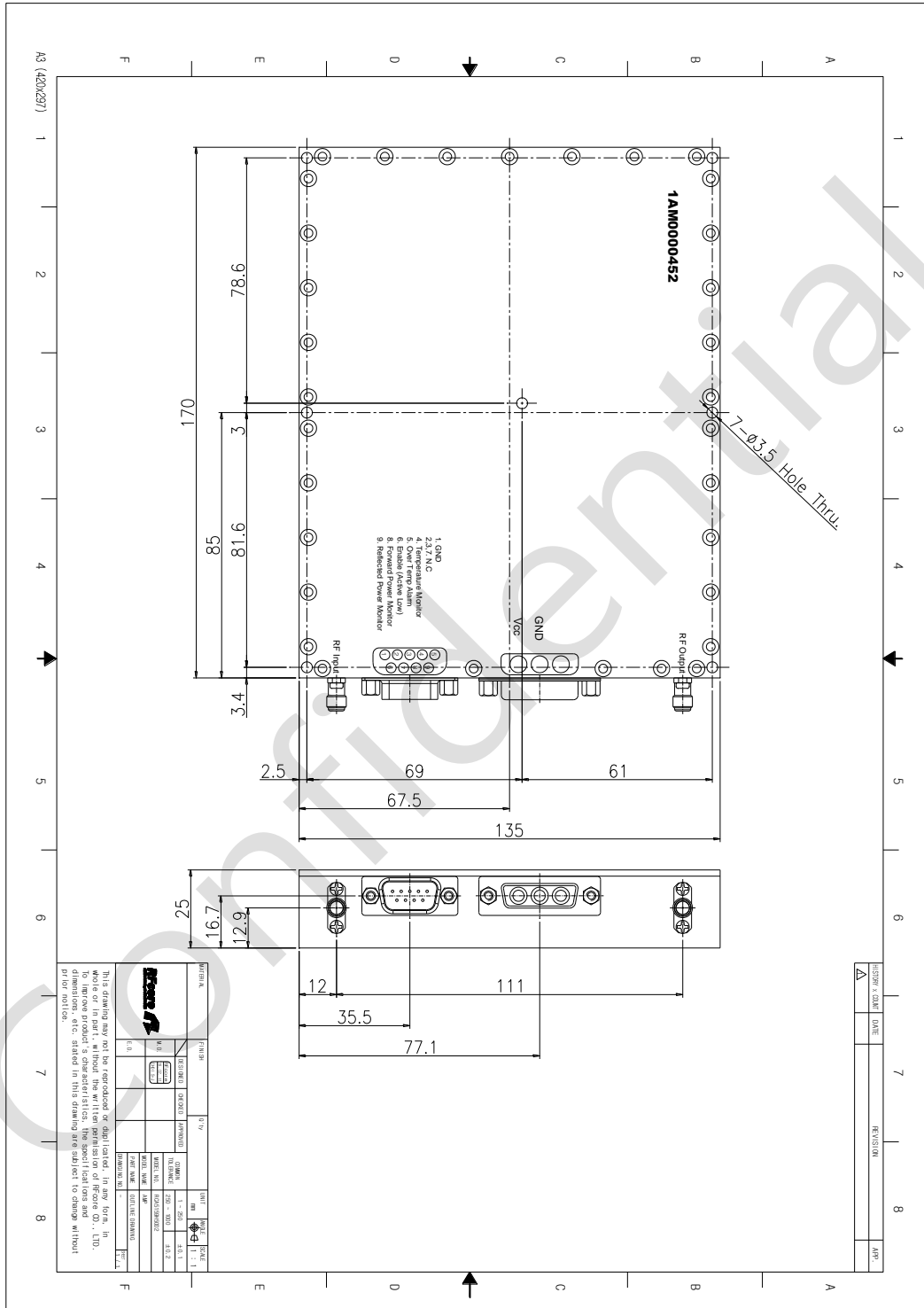
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MECHANICAL DRAWING



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