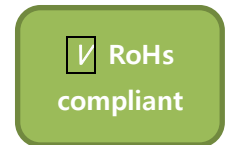


Broadband High Power Amplifier

Product Name : RCA2560H47D1

Doc. Name : General Spec.

General Specification for RCA2560H47D1



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Revision history

Revision Code	Author	Date	Engineering Change Order
A	Charlie CHO	21.Feb.2019	- Draft
B			

Created	Printed	Document Number	Revision	Manufacturer
2019/2/21	2019/4/3		A	RFcoreco.,Ltd
File : RCA2560H47D1 General Spec.docx				

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

<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	2500 ~ 6000 MHz	
Saturated Output Power	50 W min.	@ CW, 50 Ohm load condition
Large Signal Gain	42 dB min	Input Level = 0 dBm CW
Small Signal Gain	48 dB min	Input Level = -15 dBm CW
Large Signal Gain Flatness	Peak to Peak 4 dB	Input Level = 0 dBm CW
Small Signal Gain Flatness	Peak to Peak 6 dB	Input Level = -15 dBm CW
Maximum Input Power for no Damage on DC on	Short term : 10 dBm (20msec) Long term : 5 dBm	@ CW, 50 Ohm load condition
Input VSWR	Less than 2 : 1	PA enable, 50 ohms load condition
Maximum load VSWR for amplifier working	3.5 : 1	Works with degraded performance.
Enable/Disable Switching Time	10 usec max.	
DC Input Voltage	+28 ± 1.0 Vdc	At 24V, Works with degraded performance.
Shutdown Current	0.35 A max	PA disable
Quiescent Current (Idq)	5 A max.	PA enable, RF OFF
Current Consumption (Idd)	9 A max. 8 A typ.	@ Pout = 50 W CW, 50 ohms load condition
Input Signal Format	CW	Please contact the manufacturer for other modulation types or multi carriers

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INTERFACE PIN DESCRIPTION		
Connector	Description	Specification
D-Sub 9Pin Male	1. Enable (Active Low)	Internally pulled-up @ 5V with 10KΩ Does not exceed 25mA Enable : TTL Low or GND Disable : TTL High(3.3-5V) or OPEN
	2. Forward Power Detector	3.4V±0.1V@ 47dBm CW at 4.2 GHz, Note 1) Log slope ≈ 0.05V/dB
	3. N.C	Do not connect
	4. Reflected Power Detector	Log slope ≈ 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	

3 Note 1) Because the detector depends heavily on the frequency, there may be many differences in the voltage at other frequencies than those mentioned.

ENVIRONMENTAL SPECIFICATIONS		
Parameter	Specification	Remark
Operating Case Temperature (Tc)	-20 ~ 70 °C	At a hottest point of the mechanical case of amplifier module
Storage Temperature	-40 ~ 85 °C	

MECHANICAL SPECIFICATIONS		
Parameter	Specification	Remark
Dimension	200 x 120 x 25 mm ³	w/o connectors
Weight	Less than 1.25 kg	
RF Input Connector	SMA – Female	
RF Output Connector	SMA – Female	
DC / Interface Connector	D – Sub 9 Pin Male	
Cooling	Adequate Heat-sink required	

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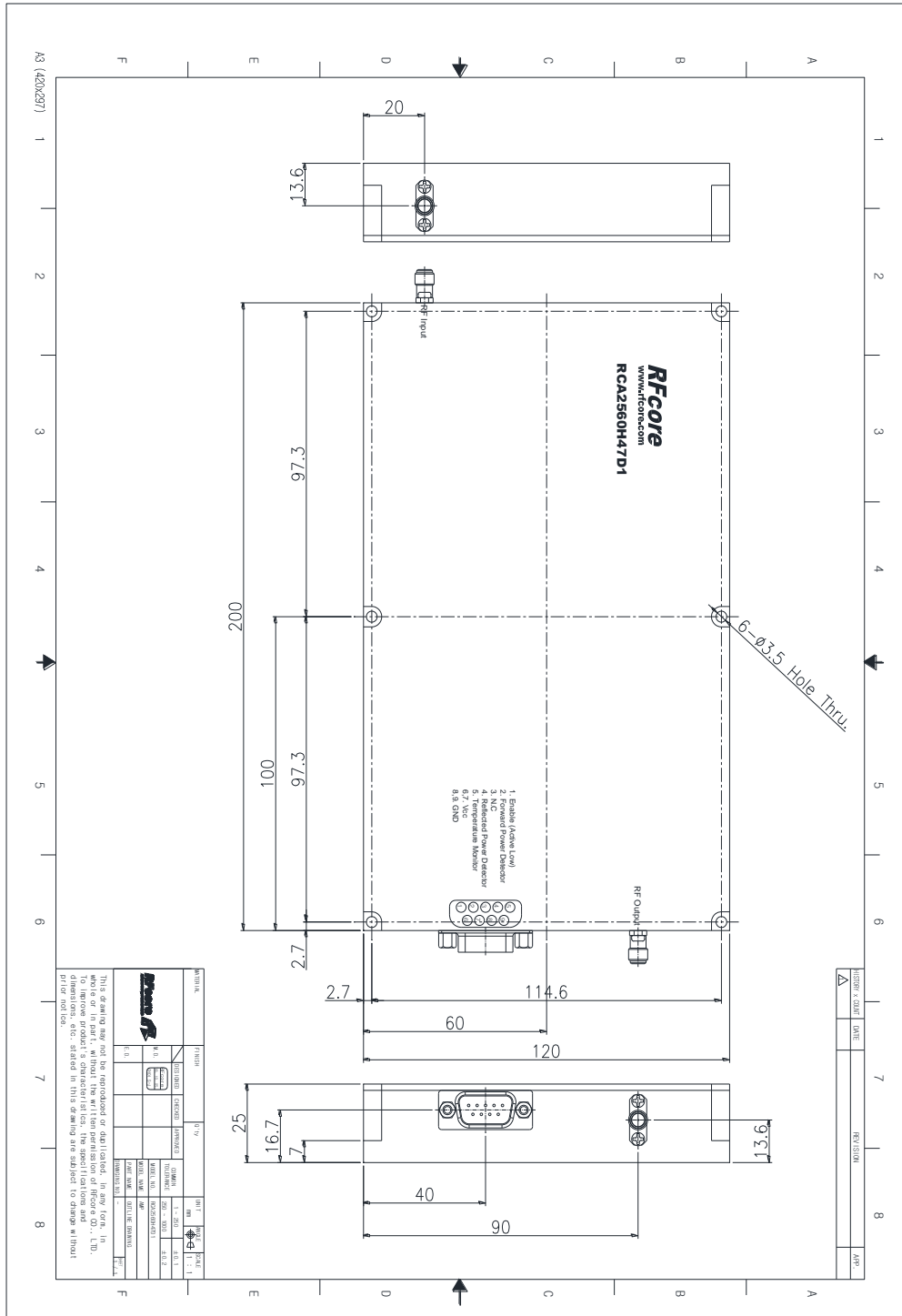
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MECHANICAL DRAWING



DRAWING REFERNECE: This is subject to change without notice.

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