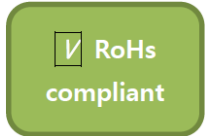


Band-Specific High Power Amplifier

Product Name : RCA0710H50D, Code Name :

Doc. Name : Preliminary Short Spec.

Preliminary short Specification for RCA0710H50D



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Created	Printed	Document Number	Revision	Manufacturer
2014/12/01	2014/12/1		A	RFcore co.,Ltd
File : RCA0710H50D Short 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>

Band-Specific High Power Amplifier

Product Name : RCA0710H50D, Code Name :

Doc. Name : Preliminary Short Spec.

ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 27 Vdc, Tc = 35 °C
Parameter	Specification	Remark
Frequency Range	790 ~ 960 MHz	
Saturated Output Power	50 dBm min.	
Small Signal Gain @ Center Frequency	45 ± 0.5 dB	Input = -15dBm
Gain Flatness	Peak to Peak 4 dB	Input = -15dBm, Over Freq Band & Temp
Gain Stability	± 1.5 dB	Operating temp.
Maximum Input Power for no damage on DC ON	10 dBm max	
Maximum Input Power for no damage on DC OFF	25 dBm max	
Input VSWR	Less than 1.5 : 1	
Output VSWR	Less than 1.5 : 1	Built-in Isolator
Handling VSWR at the output	3 : 1 min.	amplifier should withstand 10:1 VSWR for 10mS at full power , at maximum rated temperature
On/Off Switching time	5uS max.	
DC Input Current	14 A max. 12 A typ.	@ Pout = 100W
DC Input Voltage	+27 ± 1.0 Vdc	
RF Input Signal Format	CW	
I/O Map	1. GND	
	2,7. Do not connect	
	3. VSWR Fail Alarm	Alarm : reflected power = 25~ 50W @ Fcenter
	4. Temperature Monitor	VT= 3.6 - 0.022 x (T-30) T = Case Temperature± 5°C
	5. Over Temp Alarm	Alarm & Shutdown : TTL High @case temp. 85±5°C Auto Restart : TTL Low @case temp. 65±5°C
	6. Enable (Active low)	pulled-up@5V with 10KΩ
	8. Forward Power Monitor	4 ±0.2V @ CW 50dBm, slope : 0.1V/dB, Vpin8 = 4-(50-Pout)x0.1±0.2V
	9. Reflected Power Monitor	Vpin9 is the output of diode detector. it has non- log slope characteristic. 0.2 ~ 1V @ 10W ~ 100W @ Fcenter

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Band-Specific High Power Amplifier

Product Name : RCA0710H50D, Code Name :

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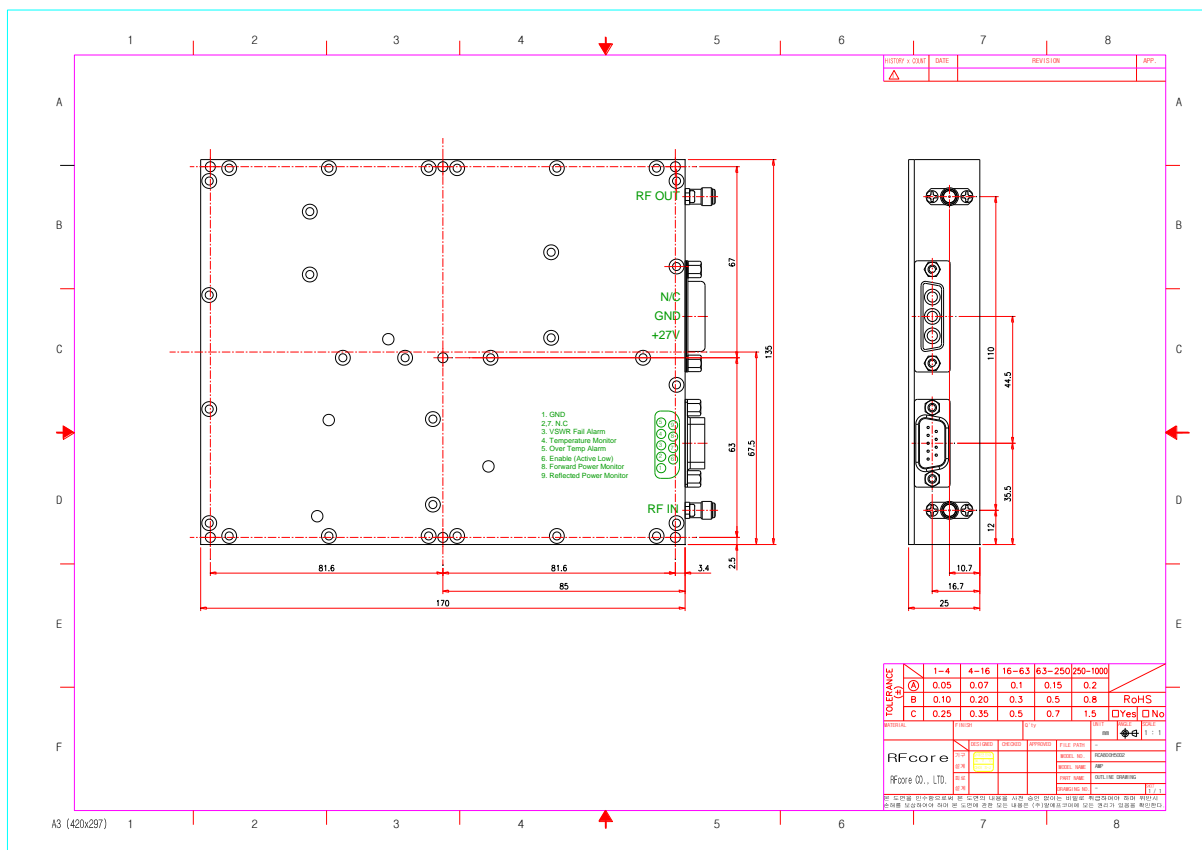
ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Case Temperature	-20 ~ 75 °C	
Storage Temperature	-40 ~ 85 °C	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	170 x 135 x 25 mm	
RF Input / Output Connector	SMA – Female(2H) / SMA – Female(2H)	
DC Connector	3W3P(A1: +27V, A2: GND, A3: N.C)	
Control Connector	D-Sub 9Pin Male	
Cooling	Adequate Heat-sink required	

MECHANICAL DRAWING



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