

Band-Specific High Power Amplifier

Product Name : RCA1900H50CW

Doc. Name : General Spec.

General Specification for RCA1900H50CW

1

RESTRICTION ON USE, DUPLICATION, OR DISCLOSURE OF PROPRIETARY INFORMATION

This document contains proprietary information, which is the sole property of RFcore co., LTD.

The document is submitted to the recipient for his use only.

By receiving this document the recipient undertakes not to duplicate the documents or to disclose in part of, or the whole of, any of the information contained herein to any third party without receiving before hand, written permission from the submitting company.

Created	Printed	Document Number	Revision	Manufacturer
2011/12/12	2015/9/8		B	RFcore co.,Ltd
File : RCA1900H50CW_revB 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>

Band-Specific High Power Amplifier

Product Name : RCA1900H50CW

Doc. Name : General Spec.

ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 27 Vdc, Tc ≅ 35 °C
Parameter	Specification	Remark
Frequency Range	1920 ~ 1980 MHz	
Saturated Output Power	100 W min.	
Small Signal Gain @ Center Frequency	45 ± 0.5 dB	Input = -15dBm
Gain Flatness	Peak to Peak 2.0 dB	Input = -15dBm
Input VSWR	Less than 1.5 : 1	
Output VSWR	Less than 1.5 : 1	
Maximum Input Power for no damage	7 dBm	
DC Input Current	12 A max., 11 A typ.	@ Pout = 100W
DC Input Voltage	+27 ± 1.0 Vdc	
I/O Map	1. GND	
	2. Do not connect	
	3. VSWR Fail Alarm	Alarm : reflected power = 25~50W @ Fcenter
	4. Temperature Monitor	VT ≅ 3.6-0.022*(T-30) ± 0.1V , T is Case Temperature in °C
	5. Over Temp Alarm	Alarm & Shutdown : High(5V) @ case temp. 85 ± 5°C Auto Restart : LOW(0V) @ case temp. 65 ± 5°C
	6. Enable (Active Low)	pulled-up@5V with 10KΩ
	7. Do not connect	
	8. Forward Power Monitor	4V±0.1V@50dBm, Log slope ≅ 0.1V/dB Vpin8 = 4-(50-Pout)x0.1±0.1V
	9. Reflected Power Monitor	Vpin9 is output(voltage) of diode detector. It has non-log slope characteristic. PA shutdown when Vpin9 reach 1.4 ± 0.1Vdc @ Fcenter

* Temp. Monitor(Vpin4) is not a specification. It is for reference value only.

Created	Printed	Document Number	Revision	Manufacturer
2011/12/12	2015/9/8		B	RFcore co.,Ltd
File : RCA1900H50CW_revB 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

Band-Specific High Power Amplifier

Product Name : RCA1900H50CW

Doc. Name : General Spec.

ENVIRONMENTAL SPECIFICATIONS

Parameter	Specification	Remark
Operating Case Temperature	-20 ~ 70 °C	
Storage Temperature	-40 ~ 85 °C	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	170 x 135 x 25 mm	
RF Input Connector	SMA – Female	
RF Output Connector	SMA – Female	
DC Power Connector	3W3P(A1:27V, A2:GND, A3:N.C)	
Interface Connector	D-Sub 9Pin Male	

Created	Printed	Document Number	Revision	Manufacturer
2011/12/12	2015/9/8		B	RFcore co.,Ltd
File : RCA1900H50CW_revB General Spec.docx				

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

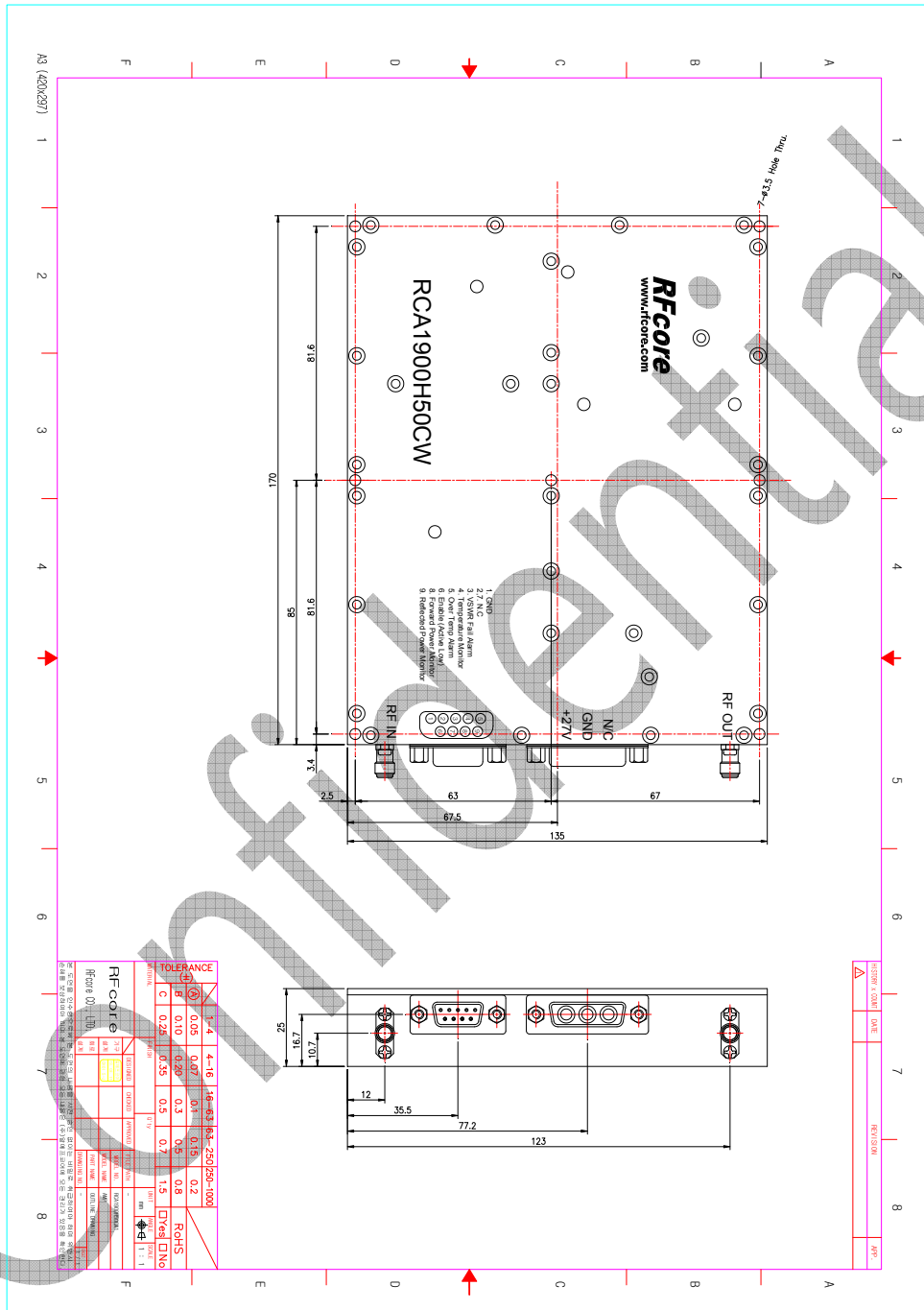
<http://www.rfcore.com>

Band-Specific High Power Amplifier

Product Name : RCA1900H50CW

Doc. Name : General Spec.

MECHANICAL DRAWING



DRAWING REFERNECE: This is subject to change without notice.

Created	Printed	Document Number	Revision	Manufacturer
2011/12/12	2015/9/8		B	RFcore co.,Ltd
File : RCA1900H50CW_revB 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