

Band-Specific High Power Amplifier

Product Name: RCA1822H48B

Doc. Name: Preliminary Short Spec.

<p style="text-align: center;">Preliminary Short Specification for RCA1822H48B</p>
--

1

<p style="text-align: center;">RESTRICTION ON USE, DUPLICATION, OR DISCLOSURE OF PROPRIETARY INFORMATION</p> <p>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 beforehand, written permission from the submitting company.</p>
--

Created	Printed	Document Number	Revision	Manufacturer
2015/4/22	2017/2/6		C	RFcore co.,Ltd
File : RCA1822H48B ShortSpec.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: RCA1822H48B

Doc. Name: Preliminary Short Spec.

ELECTRICAL SPECIFICATIONS		@ 50 Ohms load, 28 Vdc, Tc ≅ 35 °C
Parameter	Specification	Remark
Frequency Range	1800 ~ 2170 MHz	
Rated Output Power	48 dBm min. @ CW	37 dBm min. @ WCDMA 3.84MHz
Gain	37 ± 2.0 dB	Pin = -10 dBm to 8 dBm @ CW, In band
Gain Flatness	4.0 dB p-p	In band
Gain Stability	± 2.0 dB	Over Temp.
Input Power for rated output power	11 dBm typ. @ CW	0 dBm @ WCDMA 3.84 MHz
Maximum input power for no damage	20 dBm @ CW	
ACLR ± 5 MHz for 1FA	40 dBc min.	Single carrier WCDMA, 3GPP Test Model 1, 64DPCH, PAR = 7.5 dB @ 0.01% Probability on CCDF
ACLR ± 10 MHz for 1FA	50 dBc min.	
ACLR ± 5 MHz for 2FA	25 dBc min.	Multi-carrier WCDMA, 3GPP Test Model 1, 64DPCH, PAR = 9.8 dB @ 0.01% Probability on CCDF
ACLR ± 10 MHz for 2FA	35 dBc min.	
Input VSWR	Less than 1.5 : 1	
Output VSWR	Less than 1.5 : 1	Built in Isolator
Maximum load VSWR for amplifier survival	Infinite, all phase	
DC Input Voltage for 28VDC	28 ± 1 Vdc	
DC Current Consumption for 28VDC	8 A max. 6A typ.	

2

Interface Pin Description		
Connector	Description	Specification
D-Sub 9Pin Male	1. Temperature Monitor	VT= 10(mV) * Tc(°C) + 500(mV), Tc = Case Temperature ± 5°C
	2. Forward Power Monitor	
	3. GND	
	4. Reflected Power Monitor	
	5. N.C	
	6. Vcc	
	7. Vcc	
	8. GND	
	9. Enable (Active low)	pulled-up@5V with 10KΩ

Created	Printed	Document Number	Revision	Manufacturer
2015/4/22	2017/2/6		C	RFcore co.,Ltd
File : RCA1822H48B ShortSpec.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: RCA1822H48B

Doc. Name: Preliminary Short Spec.

ENVIRONMENTAL SPECIFICATIONS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Remark
Dimension	135 x 100 x 25 mm	
Weight	Less than 630 g	
RF Input / Output Connector	SMA – Female(2H)	
I/O Interface connector	D-SUB 9pin male	

Created	Printed	Document Number	Revision	Manufacturer
2015/4/22	2017/2/6		C	RFcore co.,Ltd
File : RCA1822H48B ShortSpec.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: RCA1822H48B

Doc. Name: Preliminary Short Spec.

Created	Printed	Document Number	Revision	Manufacturer
2015/4/22	2017/2/6		C	RFcore co.,Ltd
File : RCA1822H48B ShortSpec.docx				

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

<http://www.rfcore.com>

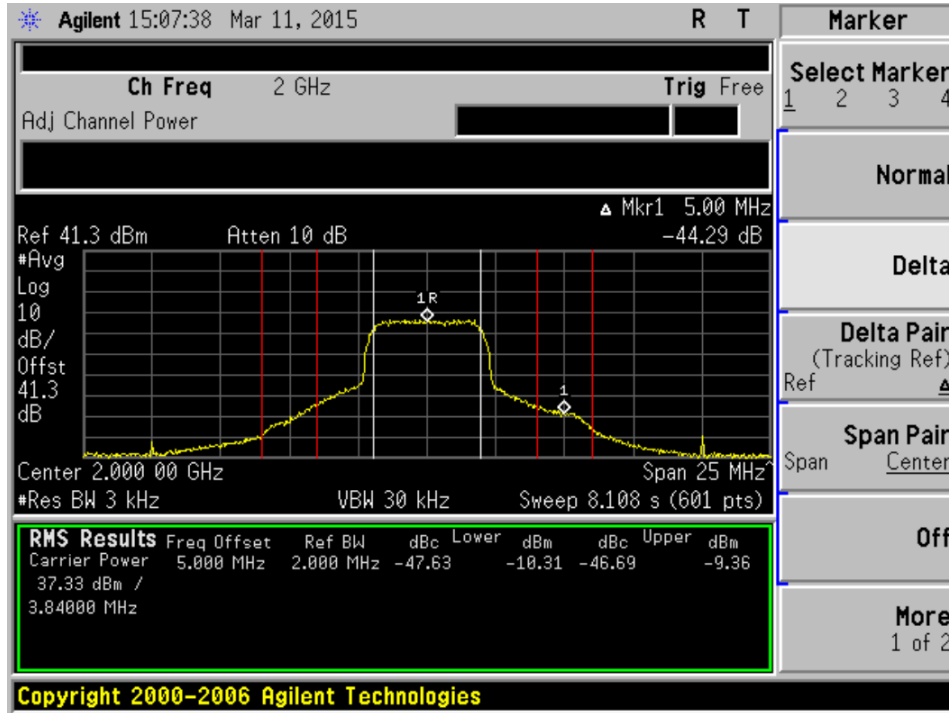
Band-Specific High Power Amplifier

Product Name: RCA1822H48B

Doc. Name: Preliminary Short Spec.

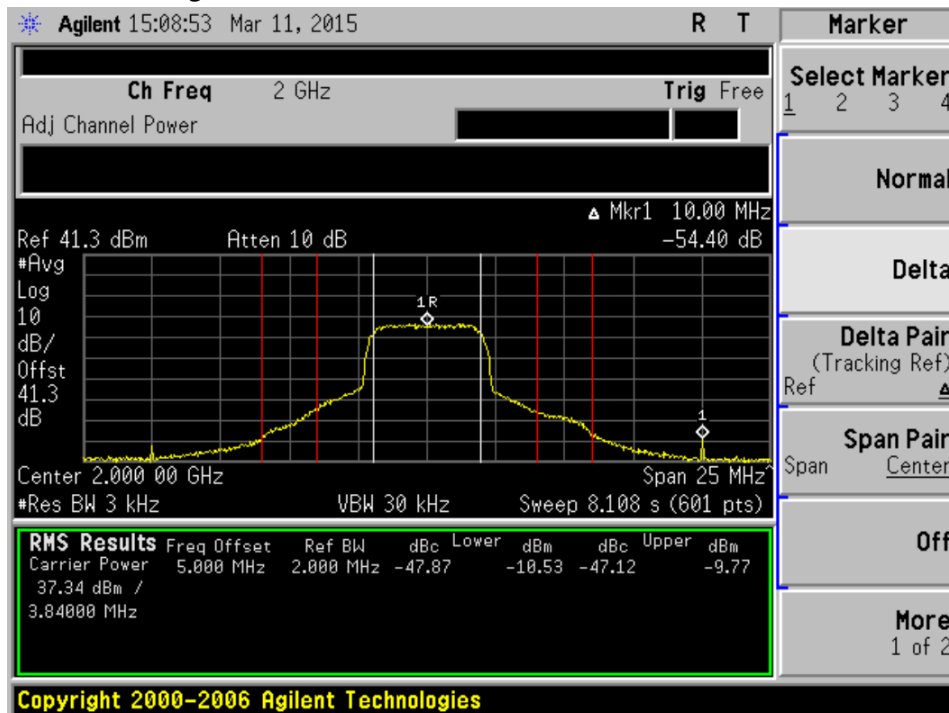
RF Performance

ACLR ± 5 MHz for Single Carrier



6

ACLR ± 10 MHz for Single Carrier



Created	Printed	Document Number	Revision	Manufacturer
2015/4/22	2017/2/6		C	RFcore co.,Ltd
File : RCA1822H48B ShortSpec.docx				

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

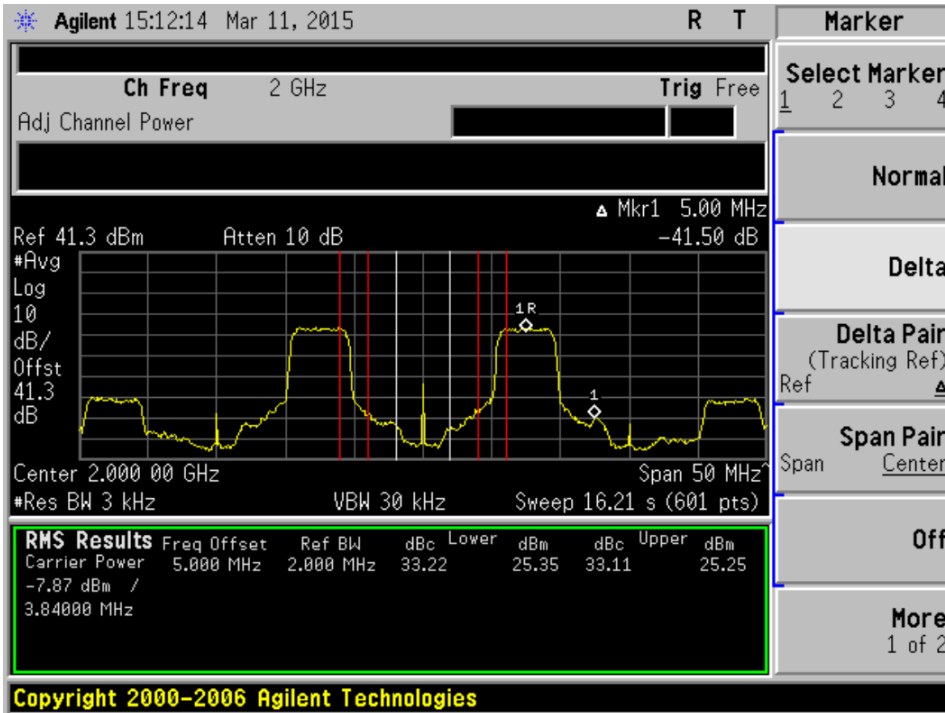
http://www.rfcore.com

Band-Specific High Power Amplifier

Product Name: RCA1822H48B

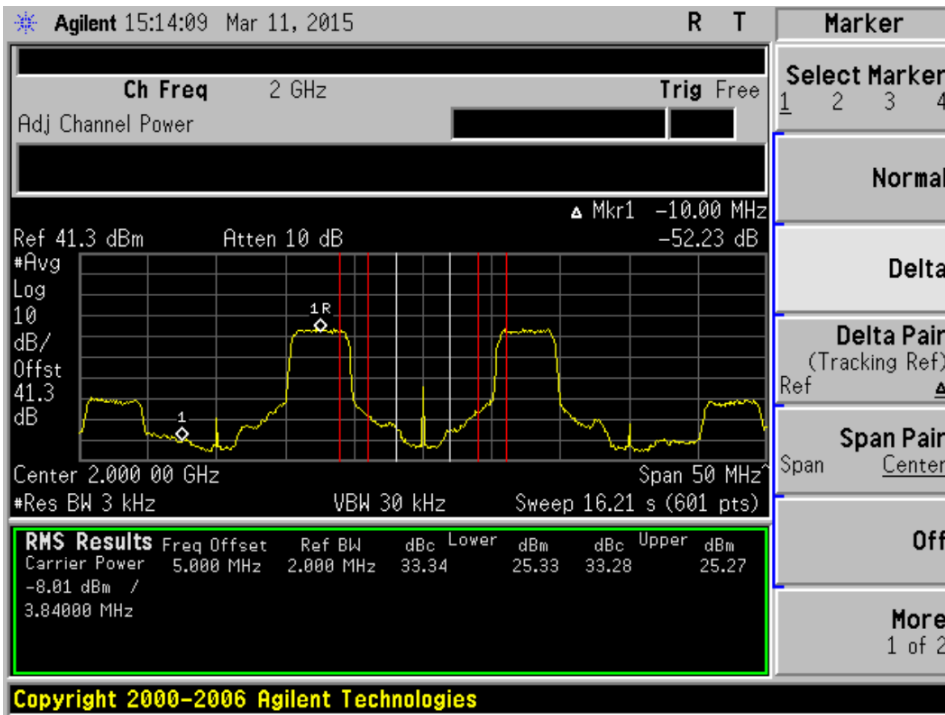
Doc. Name: Preliminary Short Spec.

ACLR ± 5 MHz for Multi Carrier



7

ACLR ± 10 MHz for Multi Carrier



Created	Printed	Document Number	Revision	Manufacturer
2015/4/22	2017/2/6		C	RFcore co.,Ltd
File : RCA1822H48B ShortSpec.docx				

The Specifications is subject to change before finalization

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

Email: sales@rfcore.com

http://www.rfcore.com