

2000 ~ 6000 MHz Low Noise Amplifier

Key Features:

Broad Frequency Range: 2000 ~ 6000 MHz
High Gain: 27 dB
Low Noise Figure: 0.75 dB
Single DC Supply: 40 mA @ +5V
Unconditional Stable: K>1
RoHS Compliant

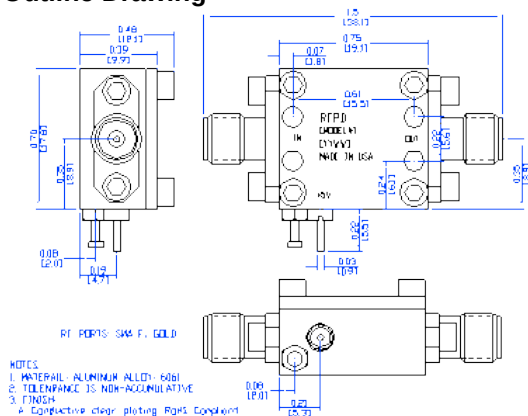
Absolute Maximum Ratings

Parameters	Value	Units
DC Power Supply voltage	6.0	V
Drain Current	50	mA
Total Power Dissipation	300	mW
RF Input Power (Peak)	10	dBm
Channel Temperature	150	°C
Storage Temperature	-65 ~ +150	°C
Operating Temperature	-40 ~ +85	°C
Thermal Resistance	220	°C/W

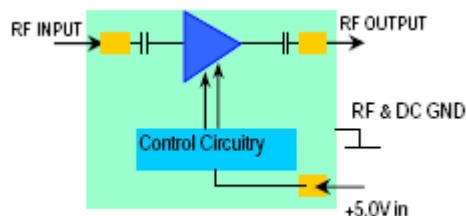
Electrical Specifications: (at +25° C)

Testing Item	Symbol	Test Condition	Min	Nom	Max	Unit
Frequency Range	BW		2000		6000	MHz
Gain	S_{21}	2000 ~ 6000 MHz	24	27		dB
Gain Variation	ΔG	2000 ~ 6000 MHz		+/- 1.5		dB
Reverse Isolation	S_{12}	2000 ~ 6000 MHz		40		dB
Input VSWR	S_{11}	2000 ~ 6000 MHz		1.5:1	1.8:1	
Output VSWR	S_{22}	2000 ~ 6000 MHz		1.4:1	1.8:1	
Noise Figure	NF	2000 ~ 6000 MHz		0.75	0.9	dB
Output Power @ 1dB Compression	P_{1dB}	2000 ~ 6000 MHz	10	12		dBm
Output IP3	OIP_3	2-tone, +0 dBm per tone, 1 MHz spacing		22		dBm
Average Input Power	$P_{IN, MAX}$				10	dBm
Current Consumption	I_{dd}	$V_{dd} = +5V$		40		mA
Power Supply Voltage	V_{dd}		+4.7	+5.0	+5.3	V

Outline Drawing



Function Block Diagram

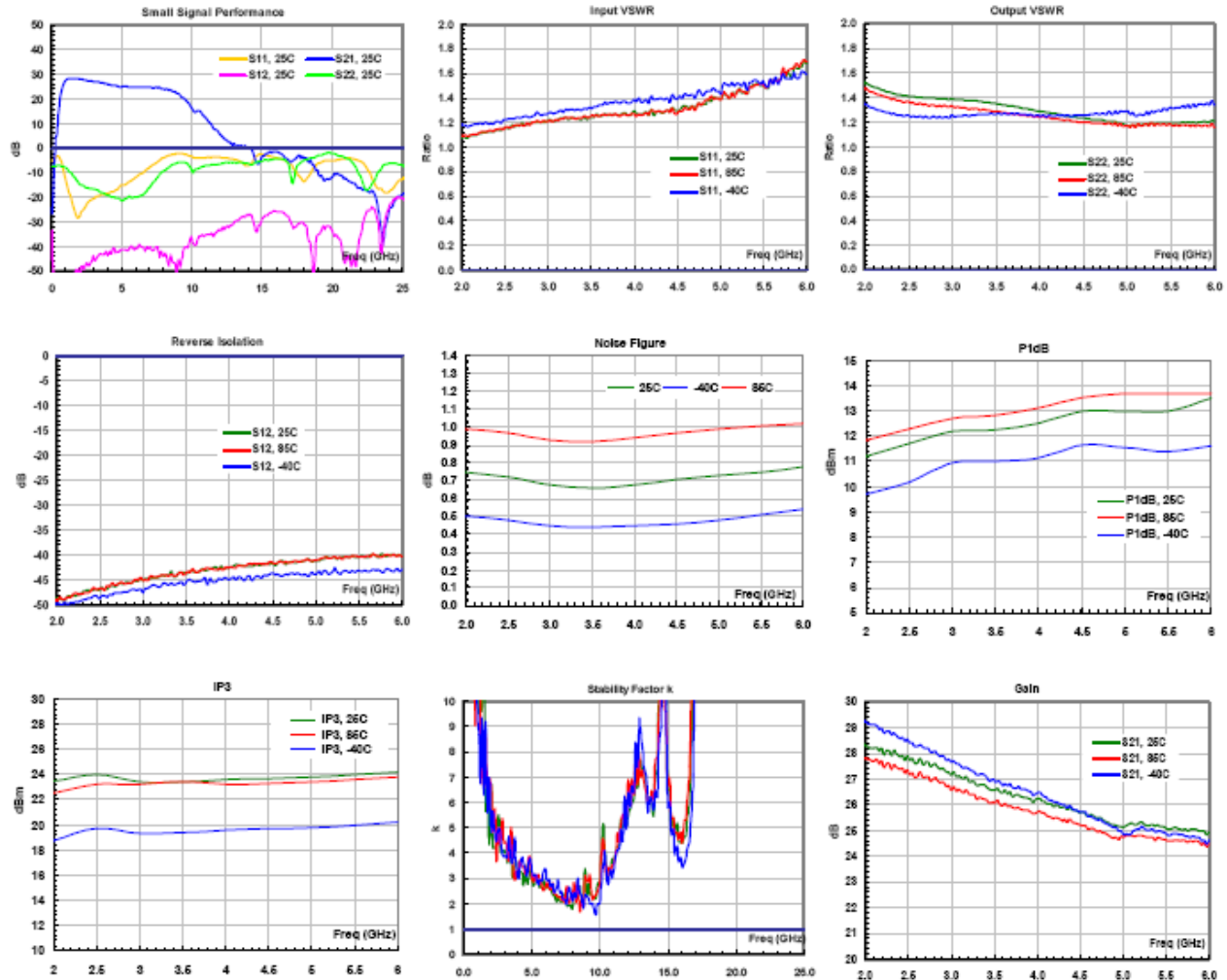


Available exclusively from Richardson RFPD - 800-737-6937 (U.S. & Canada) - 630-208-2700 (International)

Or visit www.richardsonrfpd.com. See important product notice on last page of this document.

Internal Richardson Document #	Origination Date: March 2009	Rev: 2A Date: March 2011	Page 1/3
--------------------------------	---------------------------------	-----------------------------	----------

Typical Performance



Ordering Information

Part Number	RLAC2060A
-------------	-----------

Available exclusively from Richardson RFPD - 800-737-6937 (U.S. & Canada) - 630-208-2700 (International)
Or visit www.richardsonrfpd.com. See important product notice on last page of this document.

Internal Richardson Document #	Origination Date: March 2009	Rev: 2A Date: March 2011	Page 2/3
--------------------------------	---------------------------------	-----------------------------	----------

Richardson RFPD, Inc.
40W267 Keslinger Road
P.O. Box 307
LaFox, IL 60147
Telephone: (800) 737-6937
(630) 208-2700
Fax: (630) 208-2662
Internet: www.richardsonrfpd.com

IMPORTANT NOTICE

RICHARDSON RFPD, INC. AND ITS AFFILIATES RESERVE THE RIGHT TO MAKE CHANGES TO THE PRODUCT(S) OR INFORMATION CONTAINED HEREIN WITHOUT NOTICE. RICHARDSON RFPD, INC. ASSUMES NO RESPONSIBILITY FOR ANY ERRORS WHICH MAY APPEAR IN THIS DOCUMENT.

WARRANTY INFORMATION APPLICABLE TO THE PRODUCT IDENTIFIED HEREIN IS AVAILABLE UPON REQUEST. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A WARRANTY, REPRESENTATION OR GUARANTEE OF ANY KIND. RICHARDSON RFPD, INC. EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND/OR IMPLIED INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, AND OF FITNESS FOR A PARTICULAR PURPOSE, USE OR APPLICATION.

NO PART OF THIS DOCUMENT MAY BE COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN CONSENT OF RICHARDSON RFPD, INC.

WARNING

RICHARDSON RFPD, INC. PRODUCTS ARE NOT INTENDED FOR USE IN LIFE SUPPORT APPLIANCES, DEVICES OR SYSTEMS. USE OF A RICHARDSON RFPD, INC. PRODUCT IN ANY SUCH APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.