

2000 MHz to 6000 MHz Low Noise Amplifier

Key Features:

50 Ohm Impedance
 Broad Frequency Range: 2000 – 6000 MHz
 High Gain: 25 dB
 Low NF: 0.9 dB (typical)
 Low Power Consumption: 40mA @ 5V
 Package: Surface Mount – 0.35" x 0.25" x 0.085"

Photo Not Included

Electrical Specifications¹: (at +25° C)

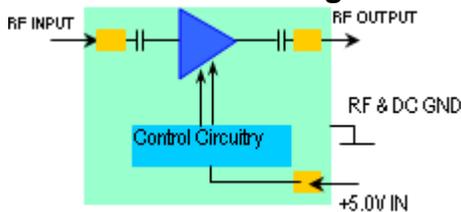
Testing Item	Symbol	Test Conditions	Min	Nom	Max	Unit
Frequency Range	BW		2		6	GHz
Gain	S21	2000 to 6000 MHz		25		dB
Gain Flatness	ΔG	2000 to 6000 MHz		+/-1.5		dB
Noise Figure	NF	2000 to 6000 MHz		0.9	1.1	dB
Input/Output VSWR		2000 to 6000 MHz		1.5:1	1.8:1	
Output Power @ 1dB Compression	P1dB	2000 to 6000 MHz	10	12		dBm
Output IP3	OIP3	Two tone +0dBm per tone, 1 MHz separation		22		dBm
DC Voltage			+4.7		+5.3	Volt
DC Current		$V_{dd} = +5 V$		40		mA

Absolute Maximum Ratings

Parameters	Units	Ratings
DC Power Supply Voltage	V	6
Drain Current	mA	70
Total Power Dissipation	mW	400
RF Input Power (Peak)	dBm	30
Channel Temperature	°C	150
Storage Temperature	°C	-65 ~ 150
Operating Temperature	°C	-40 ~ 85

Operation of this device above any one of these parameters may cause permanent damage.

Functional Block Diagram



¹ Specifications are subject to change without notice.

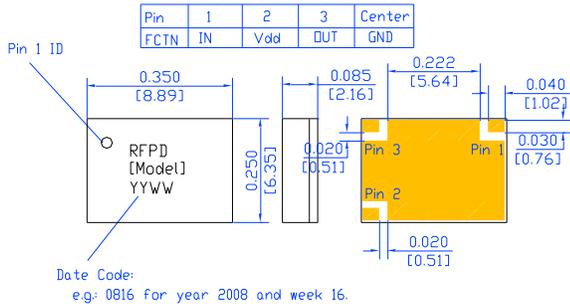
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Ordering Information

Model Number	RLAC0438C
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Outline Drawing (not scaled)



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