

Objective Product Specification

L1935

Low Noise Amplifier 1800-1950 MHz, 35 dB Gain, 0.9dB Noise Figure



FEATURES

- Extremely low Noise Figure
- High IIP3
- Superior Return Loss
- 35 dB Power Gain
- Balanced Input Stage

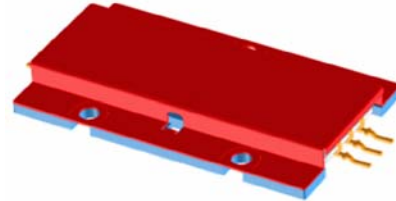
APPLICATION

- Repeater
- Base Station

DESCRIPTION

- 1.9 GHz Low Noise Amplifier employing GaAs die

L1935



Low Noise Amplifier

1800-1950 MHz
35 dB Gain
0.9dB Noise Figure

LIMITING VALUES

Notes: Operating the device above these parameters may cause permanent damage, Case Temperature $T_c=25^\circ\text{C}$

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
V_1	DC supply voltage	-	+12	V
V_2		-	-7	V
T_{stg}	Storage Temperature	- 30	+ 100	$^\circ\text{C}$
T_{opt}	Operating Temperature	- 5	+ 70	$^\circ\text{C}$

CHARACTERISTICS

Table 1: Test condition: Case Temperature $T_c = 25^\circ\text{C}$, $V_1 = 10\text{V}$, $V_2 = -5\text{V}$

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
f	Frequency		1800	-	1950	MHz
I_1	Supply Current		-	-	550	mA
I_2	Supply Current		-	-	20	mA
G_a	Power Gain		-	35	-	dB
S11	Input Return Loss		20	-	-	dB
S22	Output Return Loss		20	-	-	dB
P1dB	1dB Compression Point		24	-	-	dBm
IIP3	Input 3 rd Order Intercept Point		10	-	-	dBm
NF	Noise Figure		-	0.9	-	dB

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DEFINITIONS

Data Sheet Status	
Objective Product Specification	This data sheet contains target or goal specifications for product development.
Preliminary Product Specification	This data sheet contains preliminary data; supplementary data may be published later.
Product Specification	This data sheet contains final product specifications.
Limiting values	
Limiting values given are in accordance with the Absolute Maximum Rating System (IEC 60134). Stress above one or more of the limiting values may cause permanent damage to the device. These are stress ratings only and operation of the device at these or at any other conditions above those given in the Characteristics sections of the specification is not implied. Exposure to limiting values for extended periods may affect device reliability.	
Application information	
Where application information is given, it is advisory and does not form part of the specification.	

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How to contact us:



Premier Devices Germany GmbH

Loeffelholzstrasse 20, D-90441 Nuernberg, Germany

Phone: +49 (0) 911 9411 233, FAX: +49 (0) 911 9411 198,

Email: sales.germany@premierdevices.com, Internet: <http://www.premierdevices.de/>