# Objective Product Specification



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



### **FEATURES**

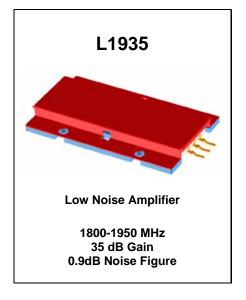
- Extremely low Noise Figure
- High IIP3
- Superior Return Loss
- 35 dB Power Gain
- Balanced Input Stage

### **APPLICATION**

- Repeater
- Base Station

### **DESCRIPTION**

• 1.9 GHz Low Noise Amplifier employing GaAs die



### **LIMITING VALUES**

Notes: Operating the device above these parameters may cause permanent damage, Case Temperature  $T_c$ =25°C

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
$V_1$	DC supply voltage		+12	V
$V_2$			-7	V
T <sub>stg</sub>	Storage Temperature	- 30	+ 100	°C
T <sub>opt</sub>	Operating Temperature	- 5	+ 70	°C

## **CHARACTERISTICS**

Table 1: Test condition: Case Temperature  $T_c = 25$ °C,  $V_1 = 10$ V,  $V_2 = -5$ V

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
f	Frequency		1800	1	1950	MHz
I <sub>1</sub>	Supply Current		1	1	550	mΑ
$I_2$	Supply Current		1	1	20	mΑ
Ga	Power Gain		1	35	ı	dB
S11	Input Return Loss		20	1	ı	dB
S22	Output Return Loss		20	1	ı	dB
P1dB	1dB Compression Point		24	1	ı	dBm
IIP3	Input 3 <sup>rd</sup> Order Intercept Point		10		-	dBm
NF	Noise Figure		-	0.9	-	dB

Page 1 of 2	January 2006	Document Revision Level B

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### **DEFINITIONS**

Data Sheet Status	
Objective Product	This data sheet contains target or goal specifications for product
Specification	development.
Preliminary Product	This data sheet contains preliminary data; supplementary data may
Specification	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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