

## 4 – 8 GHz, 27dBm Power Amplifier

### *General Description*

The NB00434 is a single biased that operates between 4.0 GHz and 8.0 GHz. A thin film hybrid MIC process is used to achieve robust characteristics over temperature range -30°C to +70°C. The amplifier incorporates internally protected voltage regulator, reverse polarity protection and can be biased in a wide range of DC voltage. Both input and output RF connectors are field replaceable SMA-F connectors.



### *Performance 25 °C*

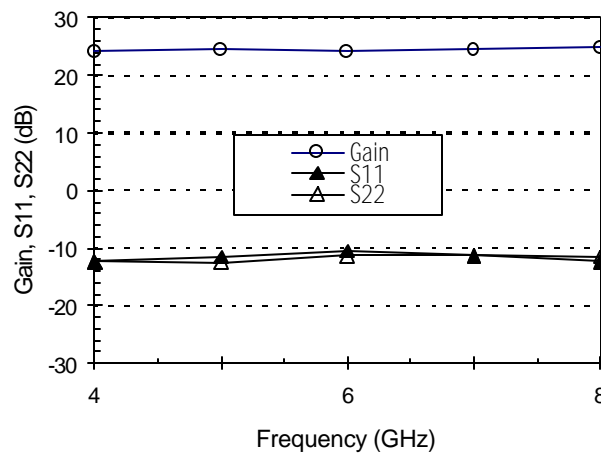
Parameter	Min.	Typ.	Max.	Units
Frequency	4.0		8.0	GHz
Gain at room temperature	22	24		dB
Gain Flatness over all frequency range at room temperature			± 1.0	DB
Noise Figure at room temperature		4.8	5.5	dB
1 dB Compression Point at room temperature	26.5	27.5		dBm
Output IP3	35	37		dBm
Input VSWR			2.0 : 1	
Output VSWR			2.0 : 1	
DC supply voltage (Vcc)	+10	+15	+17	V
Supplied Current		330	350	mA
Operating Temperature	-30		70	degC

Customized Designs: For custom designs, including both electrical and mechanical, please contact us at [sales@nextec-rf.com](mailto:sales@nextec-rf.com).

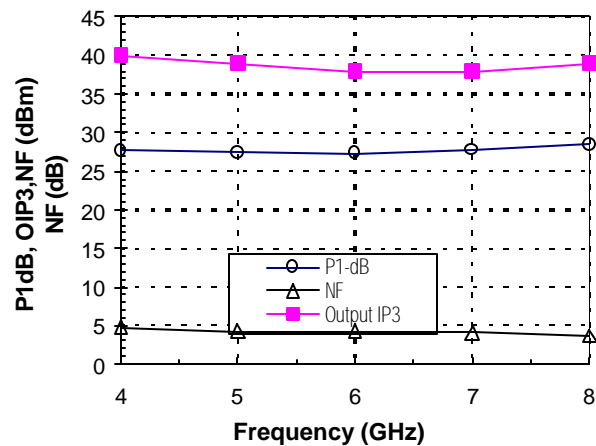
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### *Typical Test Data*

#### Gain and Return Losses at 25 degC



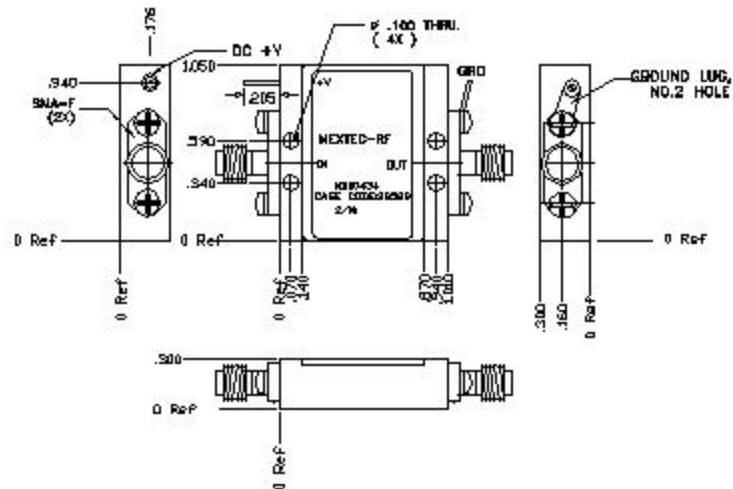
#### P1-dB, Output IP3, IP2 and Noise Figure at 25 degC



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### *Outline Drawing*



(unit: inch)

### *Connector Description*

RFin	RF input signal (replaceable SMA-F)
RFout	RF output signal (replaceable SMA-F)
Vcc	DC Supply Voltage (10V to 15 V)

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