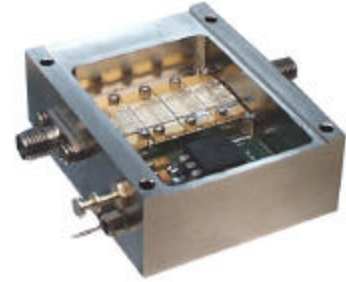


2-8 GHz 1 Watt Power Amplifier

General Description

The NB00383 is a single biased (+12V) broadband power amplifier that operates between 2 GHz and 8 GHz. A thin film hybrid MIC process is used to achieve robust characteristics. Both input and output RF connectors are replaceable SMA-F connector.



Performance with -50 to +90 degC, Vcc = +12

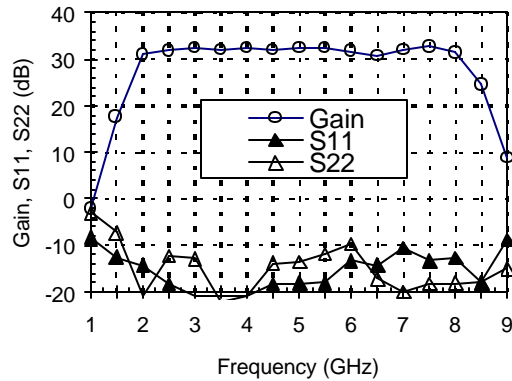
Parameter	Min.	Typ.	Max.	Units
Frequency	2000		8000	MHz
Gain at room temperature (over temperature)	30 (28.5)		35 (39)	dB
Gain Flatness over all frequency range at room temperature			± 1.9	dB
Noise Figure at room temperature		5.0	8.0	dB
1 dB Compression Point at room temperature (over temperature)	30 (28.5)	30		dBm
Third Order Intercept Point @ -15 dBm input power /tone, room temperature	37.0	39.0		dBm
Input VSWR			2.0 : 1	
Output VSWR			2.0 : 1	
DC supply voltage (Vcc)	+12		+18	V
Supplied Current		1050	1200	mA
Operating Temperature	-50		90	degC

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

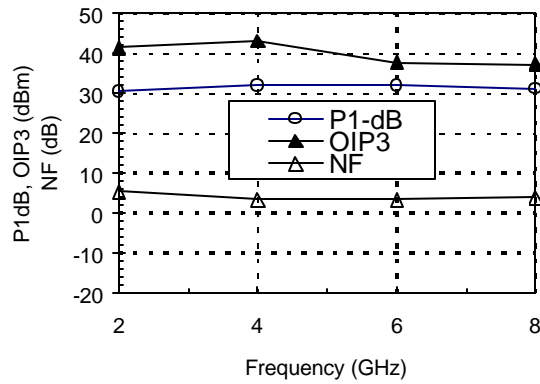
2-8 GHz 1 Watt Power Amplifier

Typical Test Data

Gain and Return Losses at 25 °C



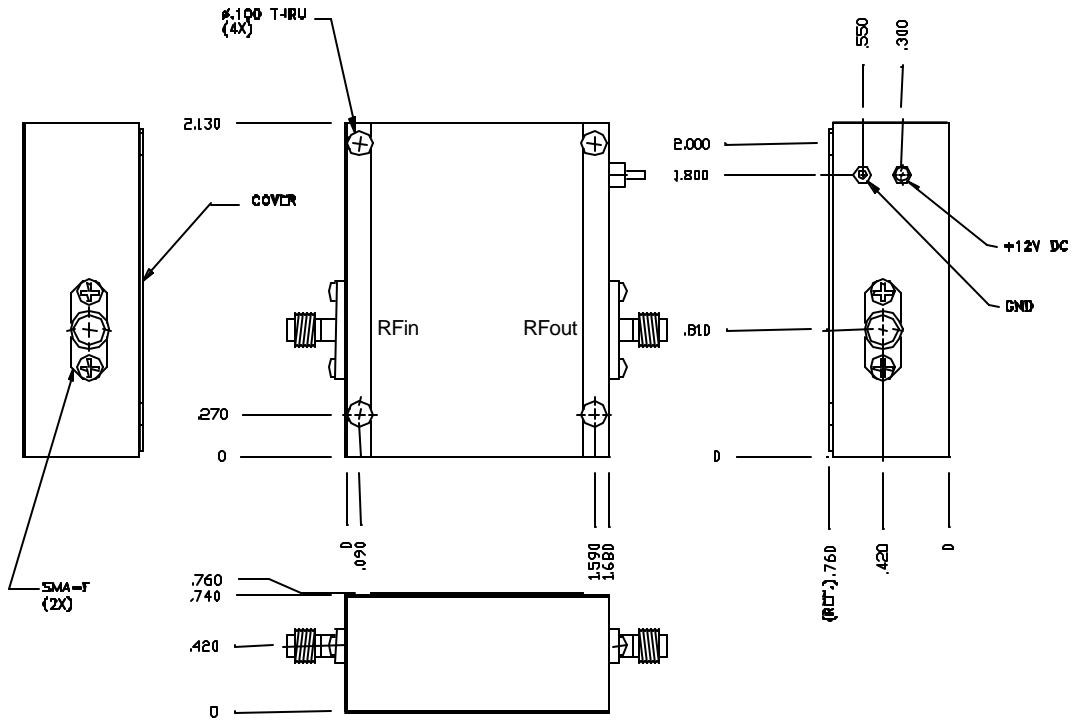
P1-dB, Output IP3 and Noise Figure at 25 °C



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2-8 GHz 1 Watt Power Amplifier

Outline Drawing



(unit: inch)

Connector Description

RFin	RF input signal (replaceable SMA-F)
RFout	RF output signal (replaceable SMA-F)
Vcc	DC Supply Voltage (+12 V)

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