

**Features: (typical values)**

- Low Noise Figure ..... 1.0 dB.
- Power Out ..... 26 dBm.
- Gain ..... 40 dB.
- No external components required

**4-8 GHz  
Cascade Amplifier**

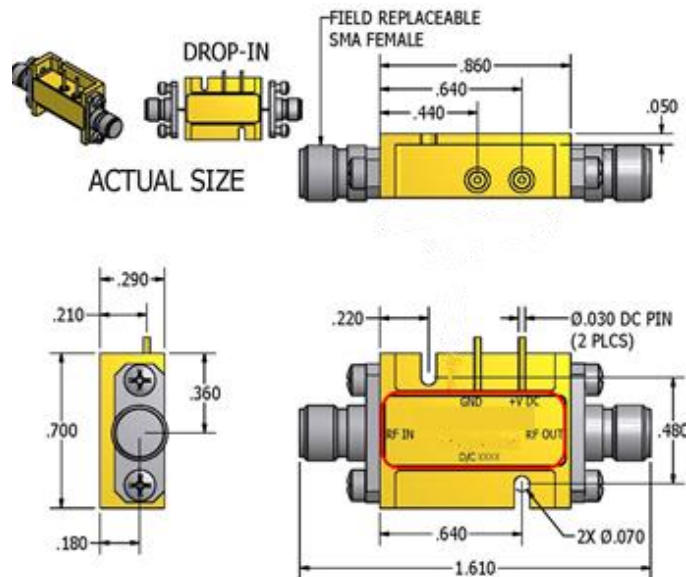
**Maximum Ratings**

Operating Temperature ..... -20°C to +60°C  
 Storage Temperature ..... -20°C to +125°C  
 DC Voltage ..... +15 volts  
 RF Input Power ..... -5 dBm.  
 Case Temperature ..... +100°C

Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		4	8	GHz.
Gain	40	36		dB.
Gain Flatness	±0.75		±1.0	dB.
Pout @ 1dB Comp	+26	+25		dBm.
Noise Figure	1.0		1.5	dB.
VSWR In/Out	1.8:1		2.0:1	Ratio
Impedance, Input/Output	50 Ohm			
Supply Required	+15/450		+15/500	v/mA.

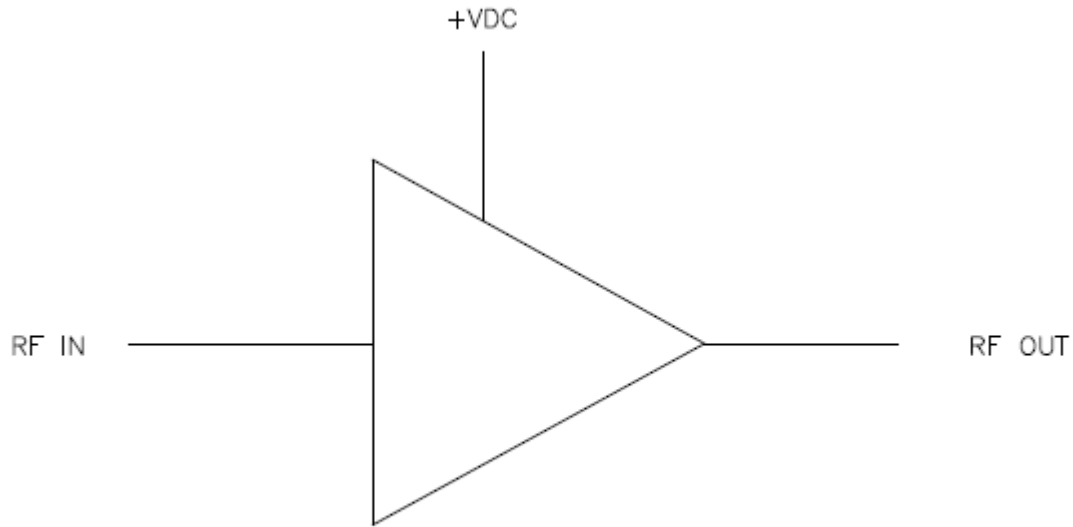
## OUTLINE



**FINAL ELECTRICAL TEST REPORT**  
**RECORD DATA @ +25°C ONLY**

<b>TEST</b> Vdc +15V	<b>LIMITS</b> -20°C/+25°C/+60°C	<b>ACTUAL</b> <b>DATA</b>
Gain 4 MHz to 8 GHz	36.0 dB min 40.0 dB typ	41.7 43.0
Gain Flatness 4 GHz to 8 GHz	2.0 dB max	1.3
Spurious Response	Accept/Reject	Accpt.
DC Current at +15 Vdc	500 mA max	381
Input VSWR 4 GHz to 8 GHz	2.0 : 1 max	1.47
Output VSWR 4 GHz to 8 GHz	2.0 : 1 max	151
Noise Figure 4 GHz to 8 GHz	1.5 dB max 1.0 dBm typ	1.0
P 1.0 dB Compression 4 GHz to 8 GHz	25.0 dBm min 26.0 dBm typ	26.0
Stability Test. For all frequency range where $ S_{21}  > 0\text{dB}$	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED