

# ASC2961C

## 6 – 12 GHz Cascade Amplifier



### Features: (typical values)

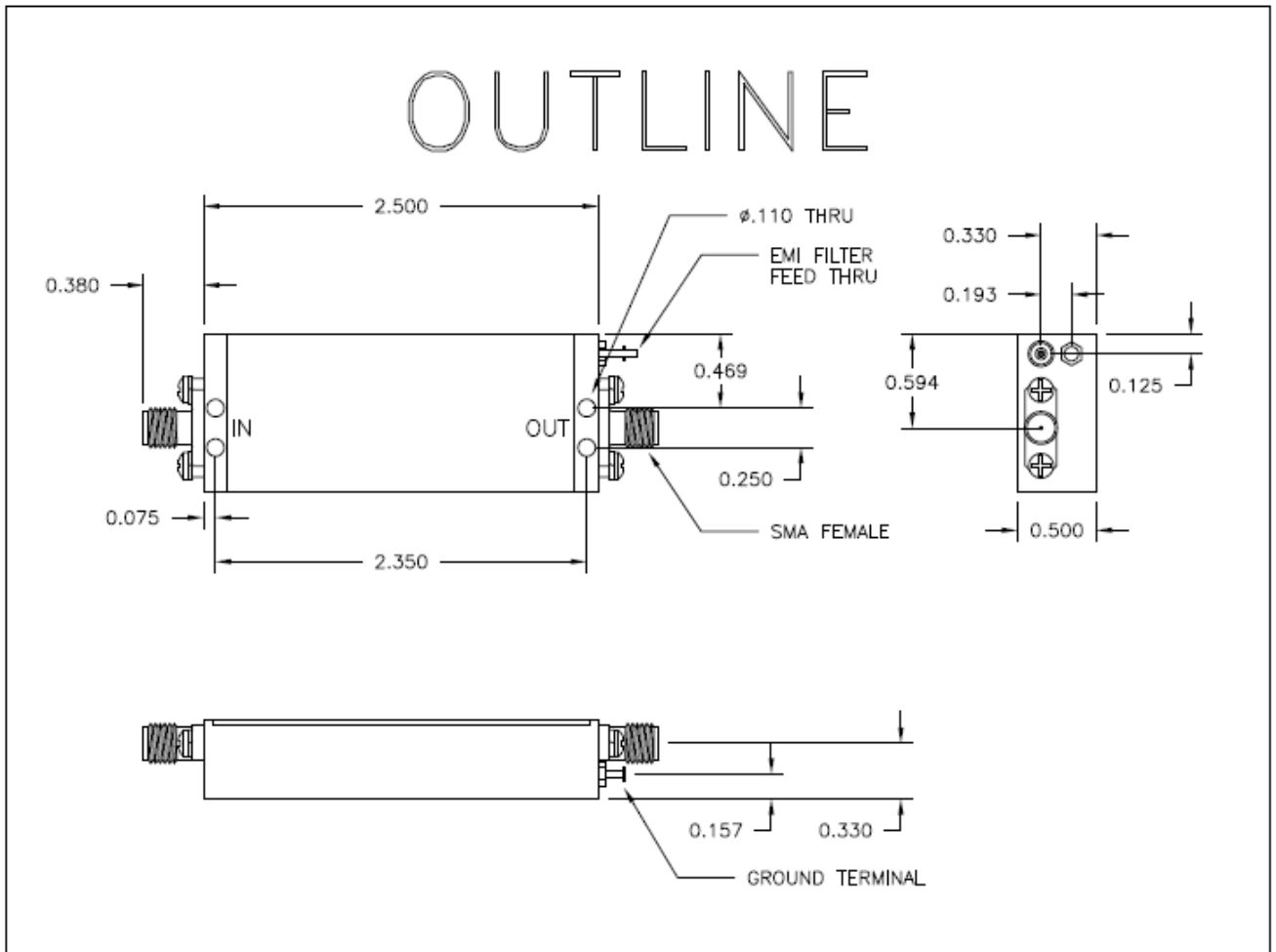
- Low Noise Figure ..... 3.5 dB.
- P1dB ..... 25 dBm.
- Gain ..... 40 dB.
- No external components required

### Maximum Ratings

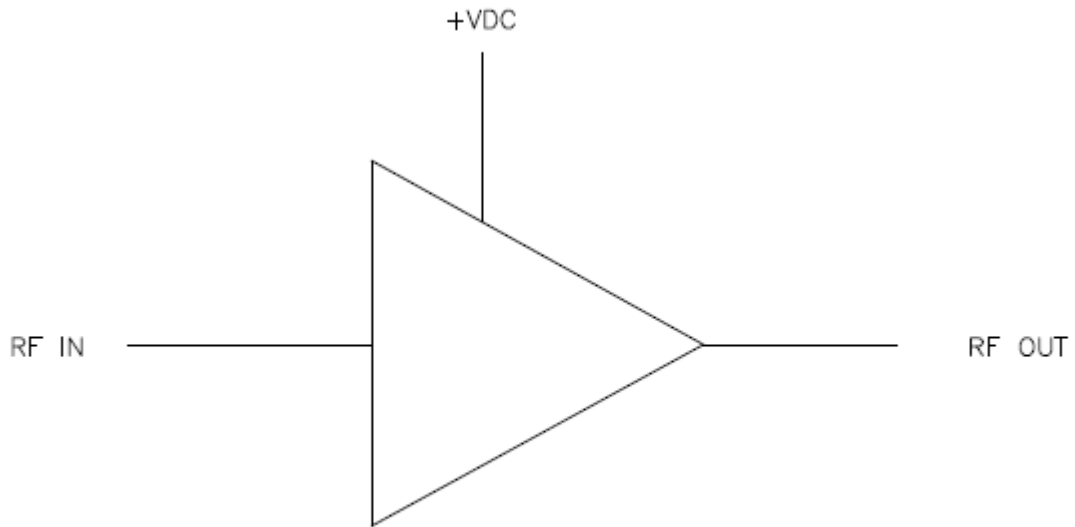
Operating Temperature ..... -20°C to +70°C  
 Storage Temperature ..... -40°C to +125°C  
 DC Voltage ..... +12.0volts  
 RF Input Power ..... +5 dBm.  
 Case Temperature ..... +100°C

Specifications (Referenced to 50 ohms)

| Parameter               | Typical Conditions | Min Value | Max Value | Units |
|-------------------------|--------------------|-----------|-----------|-------|
| Frequency               |                    | 6         | 12        | GHz.  |
| Gain                    | 50                 | 48        |           | dB.   |
| Gain Flatness Full Band | ±0.75              |           | ±1.0      | dB.   |
| Pout @ P1dB             | +25                | +24       |           | dBm.  |
| Noise Figure            | 3.5                |           | 5.0       | dB.   |
| OIP3                    | 36                 |           |           | dBm   |
| VSWR In/Out             | 1.7:1              |           | 2.0:1     | Ratio |
| Impedance, Input/Output | 50 Ohm             |           |           |       |
| Supply Required         | +12/650            |           | +12/700   | v/mA. |



FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED