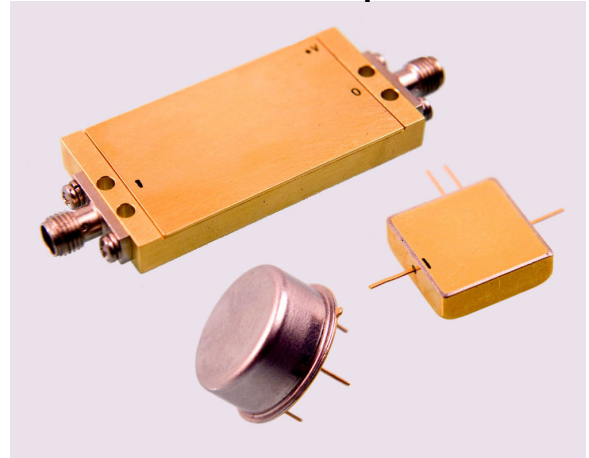


# ASC231C

## 20-3000 MHz Wideband Amplifier



### Features: (typical values)

- Wideband ..... 20-3000 MHz
- High Second Order IP2 ..... +55.0 dBm.
- High Third Order IP3 ..... +40.0 dBm.
- Moderate Gain.....+16 dB
- Moderate Noise .....+ 8.0 dB

### Maximum Ratings

- Storage Temperature ..... -55°C to +125°C
- DC Voltage ..... +17 volts
- RF Input Power ..... +15.0 dBm.
- Case Temperature ..... +95°C

### Specifications (Referenced to 50 ohms)

| Parameter                                    | Typical Conditions | Min Value | Max Value  | Units |
|--|--------------------|-----------|------------|-------|
| Frequency                                    | 20/3000            | 20        | 3000       | MHz.  |
| Gain   | 16                 | 14        |            | dB.   |
| Gain Flatness                                | ±0.3               |           | ±1.0       | dB.   |
| Gain Var. over temp.                         | 0.5                |           |            | ΔdB.  |
| Pout @ 1dB Comp                              | +25                | +23       |            | dBm.  |
| Noise Figure 20-100 MHz/ 100-3000 MHz        | 8.0/5.0            |           | 10.0 / 6.0 | dB.   |
| Reverse Isolation                            | 30                 |           |            | dB.   |
| IP <sub>3</sub> /IP <sub>2</sub> (two tone)* | 40/55              | 35/45     |            | dBm.  |
| HIP2 (2 <sup>nd</sup> harm.)                 | 60                 |           |            | dBm.  |
| VSWR In/Out                                  | 1.5:1              |           | 2.0:1      | Ratio |
| Supply Required                              | +15/350            |           | +15V/400   | v/mA  |

Min. and max. values are from 0°C to +85°C

\*IP<sub>3</sub> and IP<sub>2</sub> are in band output intercept points

