

# ASC801C

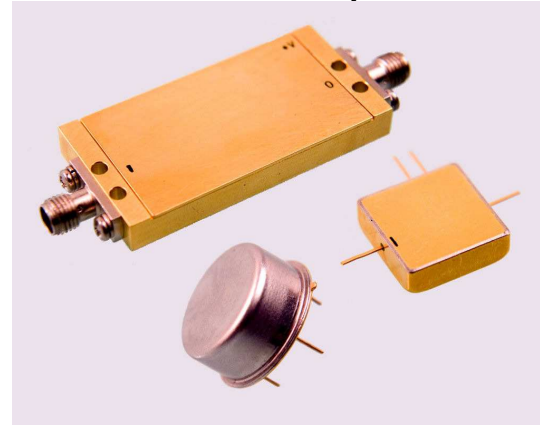
## Features: (typical values)

- Wide Band .....20-500 MHz.
- Noise Figure ..... 1.5 dB.
- High Gain ..... 41 dB.

## Maximum Ratings

Storage Temperature ..... -62°C to +125°C  
 DC Voltage ..... +17 volts  
 RF Input Power ..... +7.0 dBm.  
 Case Temperature ..... +100°C

## 20-500 MHz Cascadable Amplifier



Specifications (Referenced to 50 ohms)

| Parameter                                    | Typical Conditions | Min Value | Max Value | Units |
|--|--------------------|-----------|-----------|-------|
| Frequency                                    |                    | 20        | 500       | MHz.  |
| Gain   | 41                 | 38        |           | dB.   |
| Gain Flatness                                | ±0.5               |           | ±1.0      | dB.   |
| Gain Var. over temp                          | 0.6                |           |           | ΔdB.  |
| Pout @ 1dB Comp                              | +27                | +25       |           | dBm.  |
| Noise Figure                                 | 1.5                |           | 2.5       | dB.   |
| Reverse Isolation                            | 50                 |           |           | dB.   |
| IP <sub>3</sub> /IP <sub>2</sub> (two-tone)* | 40/44              | 35/40     |           | dBm.  |
| HIP2 (2 <sup>nd</sup> harm.)                 | 50                 |           |           | dBm.  |
| VSWR In/Out                                  | 1.7:1              |           | 2.0:1     |       |
| Supply Required                              | +15/320            |           | +15/350   | v/mA. |

Min. and max. values are from -55°C to +85°C  
 \*IP<sub>3</sub> and IP<sub>2</sub> are in band output intercept points

