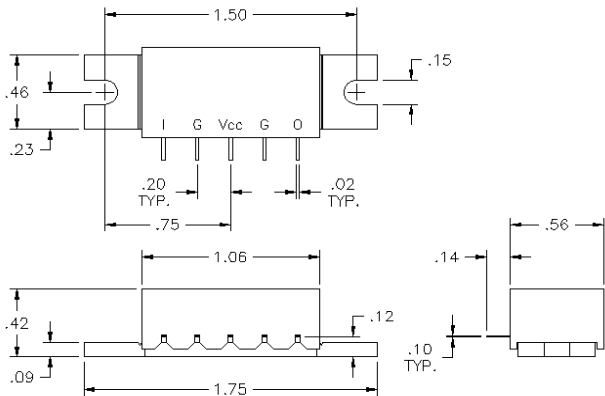


ASC102 300-1000 MHz Low Noise Amplifier

■ - -40°C
 ◆ - -25°C
 ▲ - +85°C
 Actual Performance Curves



Features: (typical values)

- Low Noise Figure 1.2 dB.
- High Output Power +27.0 dBm.
- High IP3 +43dBm.
- Low Cost
- No external components required

Specifications (Referenced to 50 ohms)

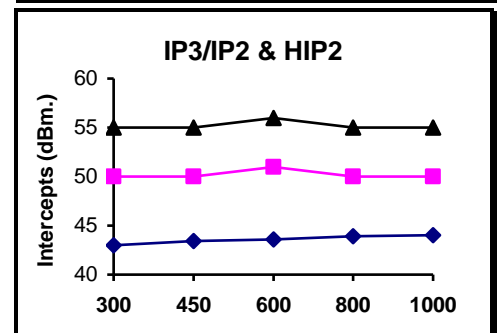
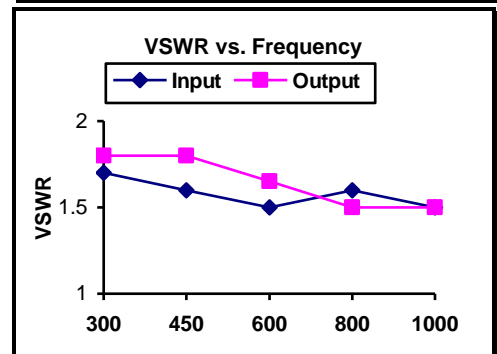
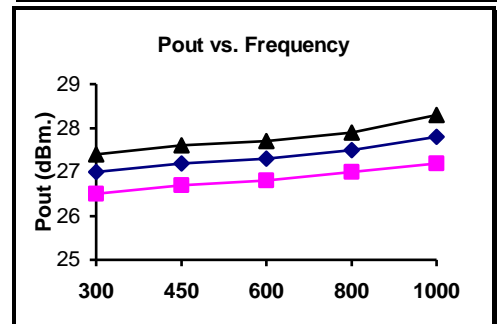
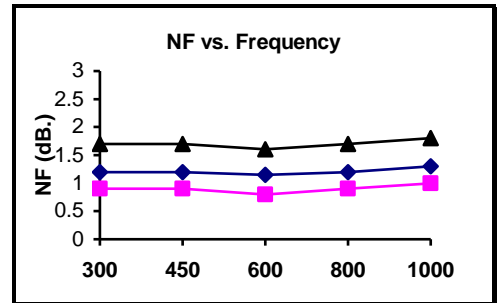
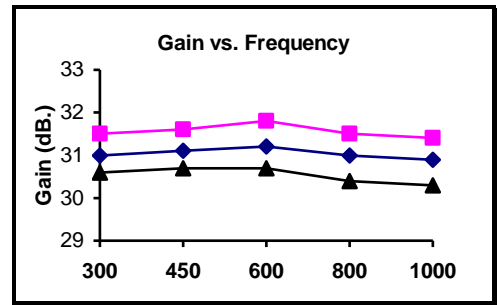
| Parameter | Typical Value | Min. Value | Max. Value | Units |
|-----------------------------|---------------|------------|------------|---------|
| Frequency | | 300 | 1000 | MHz. |
| Gain | 31.0 | 28.0 | | dB. |
| Gain Flatness | ±0.3 | | ±0.5 | dB. |
| Gain Var. over temp. | 1.0 | | | ΔdB. |
| Pout @ 1dB Comp. | +27.0 | +25.0 | | dBm. |
| Noise Figure | 1.2 | | 2.0 | dB. |
| Reverse Isolation | 35.0 | | | dB. |
| IP ₃ (two tone)* | +43.0 | +40.0 | | dBm. |
| VSWR In/Out | 1.6:1 | | 2.0:1 | |
| Supply Req'd | +15/180 | | +15/240 | v./m A. |

Min. and max. values are from -40°C to +85°C

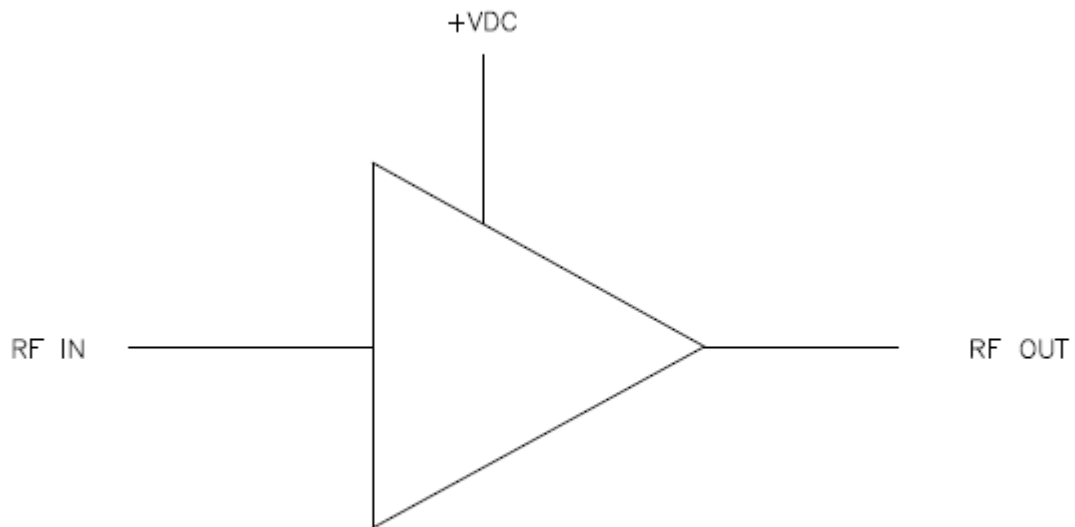
*IP3 is an in band output intercept point @ +10 dBm per tone

Maximum Ratings

- Storage Temperature -40°C to +85°C
- DC Voltage +18 volts
- RF Input Power +5.0 dBm.
- Case Temperature +95°C



FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED