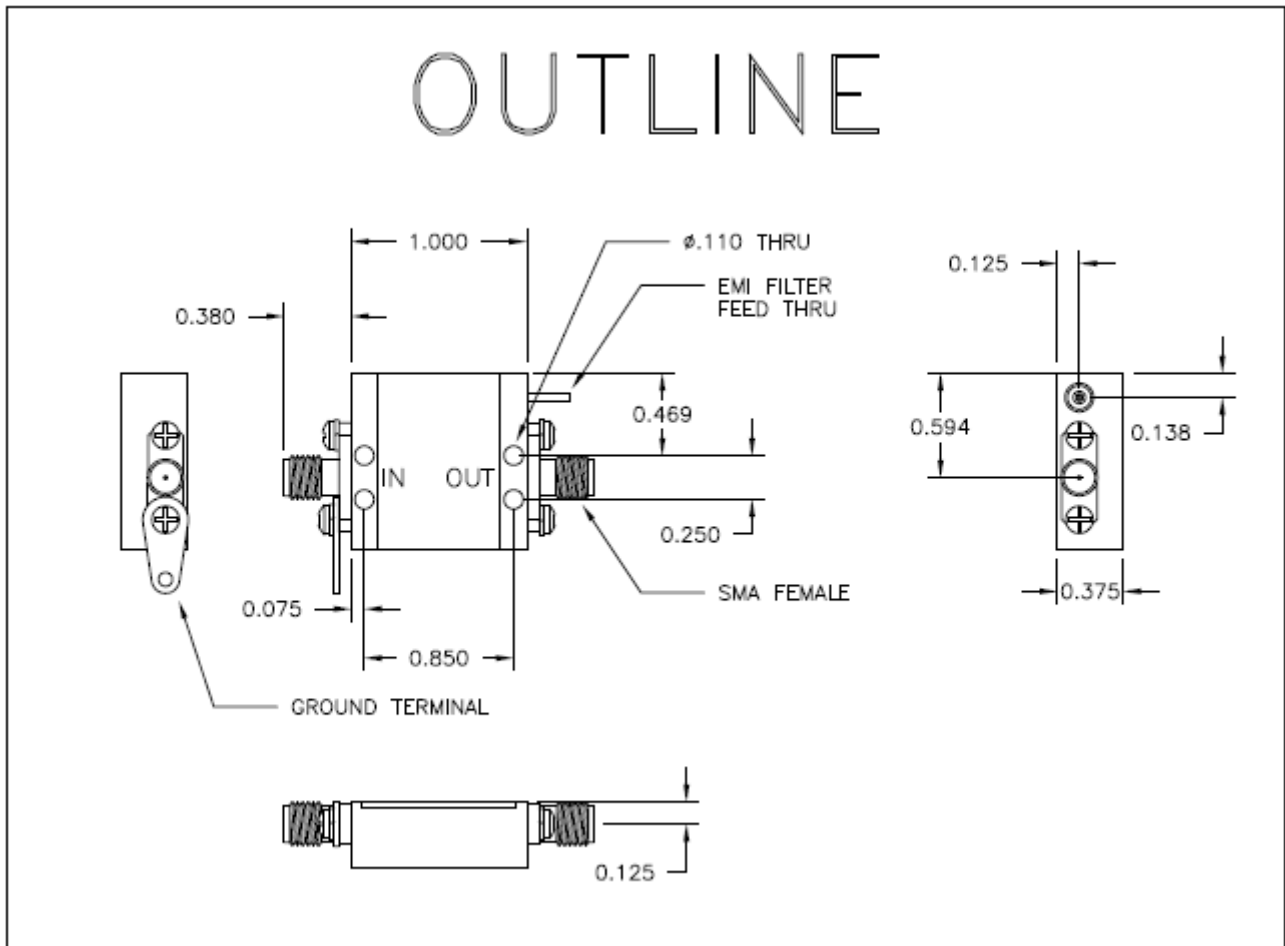


**ASC2028C
Amplifier Specifications
Guaranteed**

Amplifier ASC2028C	Parameter Value RECOMMEND
Frequency	0.5 - 32 MHZ
Gain	15.0 dB +/- 0.25 dB
Gain Flatness	1.0 dB p-p Max
Gain variation vs. Temp.	1.0 dB p-p Max
Noise Figure	4.0 dB Max.
Power Output @ 1dB comp.	+28.0 dBm Min. +29.0 dBm Typ
Third Order Two Tone Intercept Point@18dbm per tone	+45.0 dBm Typ +43.0 dBm min
Second order Two Tone Intercept Point @ 18dbm per tone	90 dBm Typ. 85 dBm min
VSWR in/out	1.5:1 Max.
Voltage Supply	+24V/ 260 mA
Impedance	50ohm system
Package size	Fig 37
Temp.	0°C to +70°C

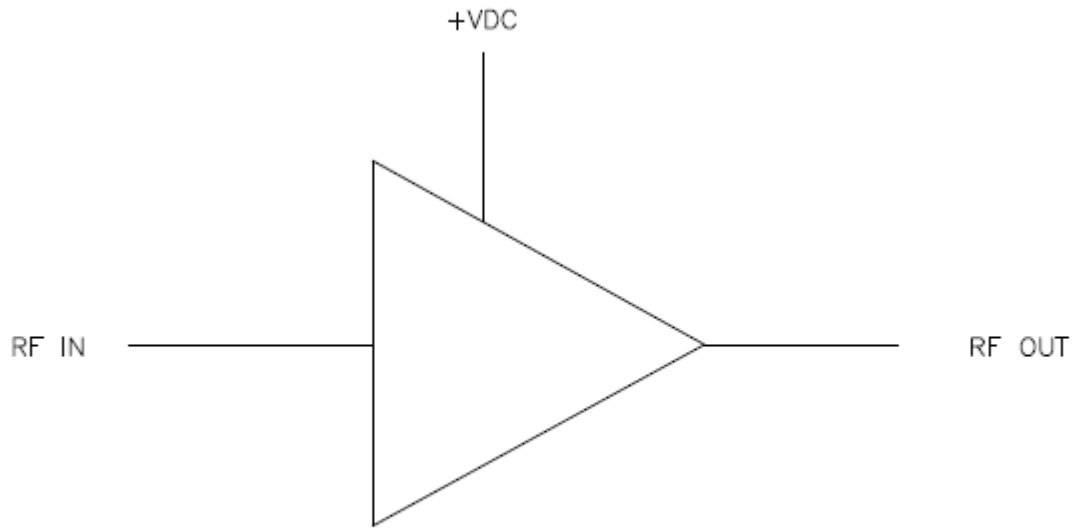
OUTLINE



FINAL ELECTRICAL TEST REQUIREMENTS

TEST Vdc +24V	LIMITS Tc = 25° C	ACTUAL DATA
Gain 0.5 to 32 MHz	15 dB +/- .25 dB	15.0
Gain Flatness 0.5 to 32 MHz	± 0.5 dB max	±0.05
Gain Variation Over Temp. 0.5 to 32 MHz	1.0 dB typ	PASS
DC Current at +24 Vdc	240 mA max	212
Input VSWR 0.5 to 32 MHz	1.5 : 1 max	1.08
Output VSWR 0.5 to 32 MHz	1.5 : 1 max	1.31
Noise Figure 10 to 32 MHz	4.5 dB max	4.5
P 1.0 dB Compression 0.5 & 32 MHz	28 dBm min	28.6
IP3 with Pout = +15.0 dBm each tone 1) F1/F2=15/17 MHz Fc=18/19 MHz	43.0 dBm min	46.0
IP2 with Pout = +15.0 dBm each tone 1) F1-F2=17-15 Fc=2 MHz 2) F1+F2=15+17 Fc=32 MHz	85.0 dBm min	89.0
Stability Test : For all frequencies Where $ S_{21} > 0\text{dB}$	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED