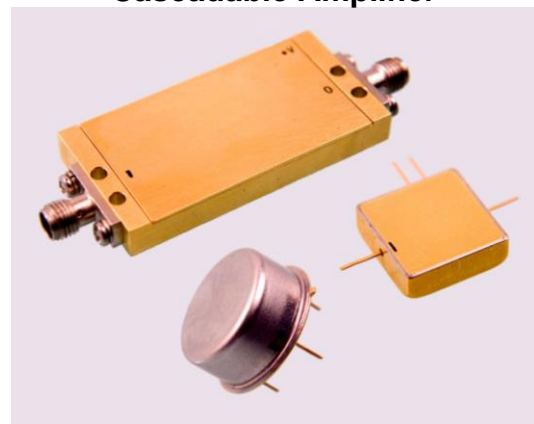


ASC805C

10-1000 MHz Cascadable Amplifier



Features: (typical values)

- Wide Band 10-1000 MHz.
- Noise Figure 3.0 dB.
- High Gain 42 dB.
- No external components required

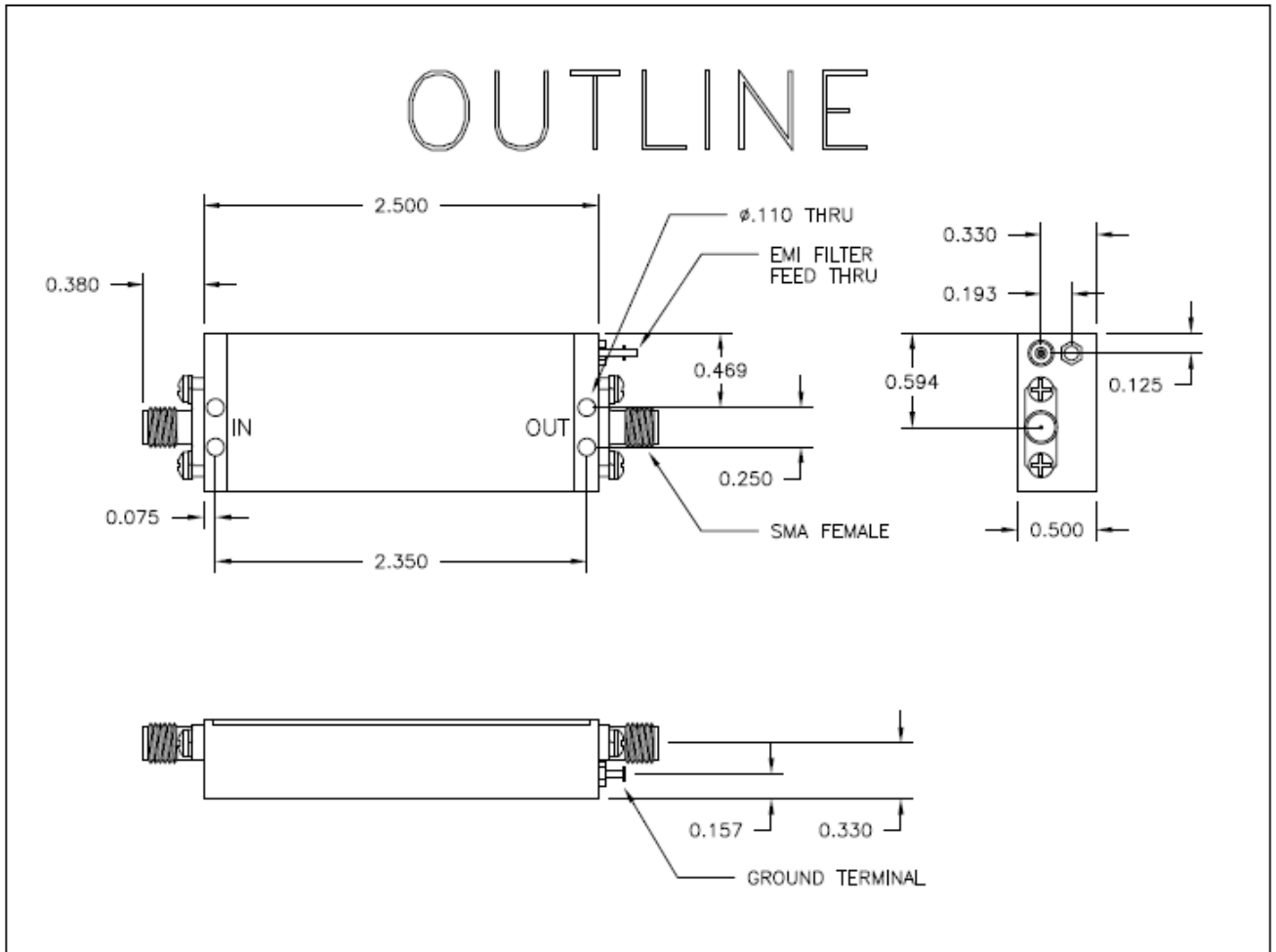
Maximum Ratings

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

Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		10	1000	MHz.
Gain	42	40		dB.
Gain Flatness	±0.5		±1.0	dB.
Gain Var. over temp	0.6			ΔdB.
Pout @ 1dB Comp	+26	+25		dBm.
Noise Figure	3.0		4.5	dB.
Reverse Isolation	60			dB.
IP ₃ /IP ₂ (two-tone)*	40/47	37/40		dBm.
HIP2 (2 nd harm.)	55			dBm.
VSWR In/Out	1.7:1		2.0:1	
Supply Required	+15/550		+15/570	v/mA.

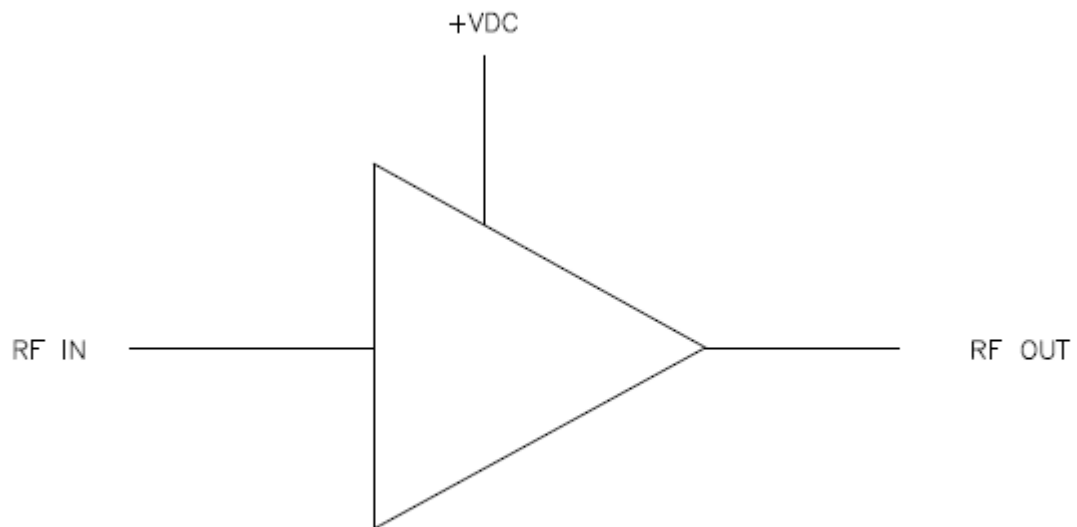
Min. and max. values are from -55°C to +85°C
 *IP₃ and IP₂ are in band output intercept points



FINAL ELECTRICAL TEST REPORT
RECORD 3 UNITS SAMPLE DATA @ +25°C ONLY

TEST Vdc +15V	LIMITS -55°C/+25°C/+85°C	ACTUAL DATA
Gain 10 MHz to 1000 MHz	40 dB min 42 dB typ	42.4 43.0
Gain Flatness 10 MHz to 1000 MHz	± 1.0 dB max	±0.3
Gain Variation vs. Temp. 10 MHz to 1000 MHz	±0.5 dB Typ	0.5
DC Current at +15 Vdc	570 mA Max	419
Input VSWR 10 MHz to 1000 MHz	2.0 : 1 max	1.57
Reverse Isolation	60.0 dB typ	61
Output VSWR 10 MHz to 1000 MHz	2.0 : 1 max	1.55
Noise Figure 10 MHz to 1000 MHz	4.5 db max	4.18
P 1.0 dB Compression 10 MHz to 1000 MHz	25.0 dBm min	26.8
IP3 with Pout = +13 dBm each tone 1) F1/F2 = 10/11 MHz Fc = 9/12 MHz 2) F1/F2 = 999/1000 MHz Fc = 998/1001 MHz	37 dBm min	39.0
IP2 with Pout = +13 dBm each tone 1) F1 - F2 = 1000-990 MHz Fc = 10MHz 2) F1 + F2 = 10+990 MHz Fc = 1000 MHz	40 dBm min	45.0
HIP2 @ +13dbm power	55 dbm Typ	56
Stability Test For all frequency range Where S21 > 0dB	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED