

ASC2807C

20-500 MHz Cascade Amplifier



Features: (typical values)

- Low Noise Figure 2.0 dB.
- Power Out 31.5 dBm.
- Gain 26 dB.
- No external components required

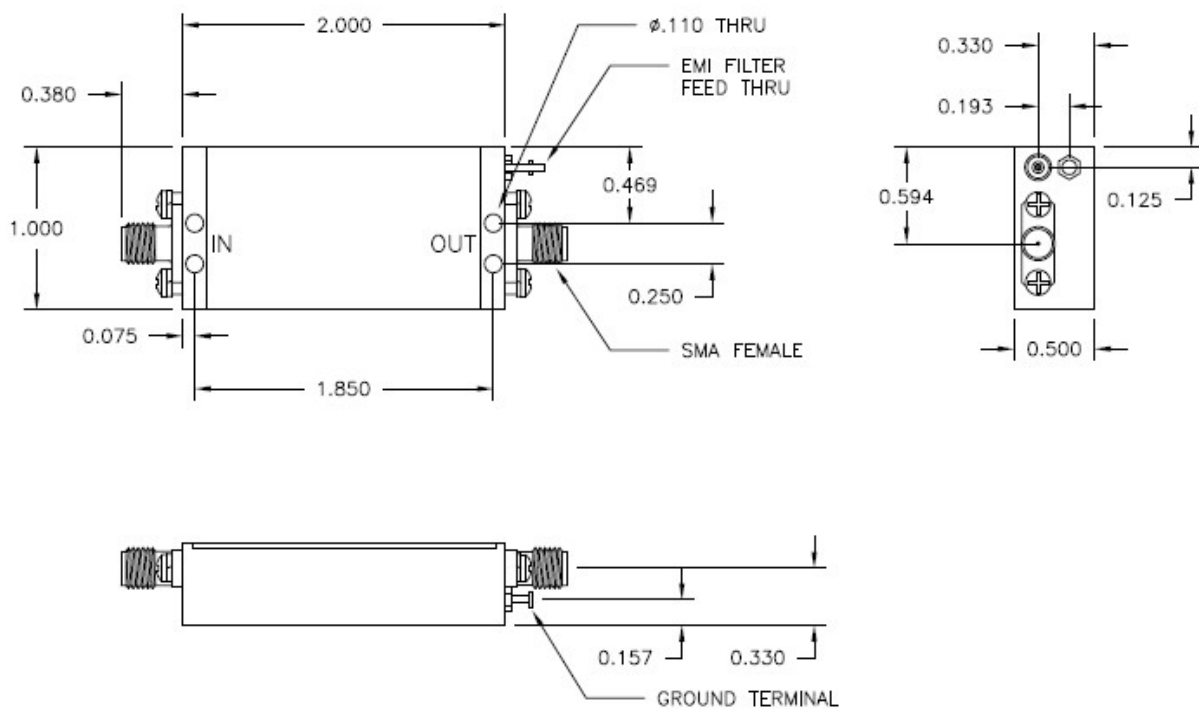
Maximum Ratings

Operating Temperature -20°C to +60°C
Storage Temperature -20°C to +125°C
DC Voltage +15 volts
RF Input Power +10 dBm.
Case Temperature +100°C

Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		20	500	MHz.
Gain	26	24		dB.
Gain Flatness	±0.3		±1.0	dB.
Pout @ 1dB Comp	+31.5	+30		dBm.
Noise Figure	20-100MHz 100-500MHz	2.3 2.0	2.8 2.3	dB.
VSWR In/Out	1.6:1		2.0:1	Ratio
Impedance, Input/Output	50 Ohm			
Supply Required	+15/400		+15/500	v/mA.

OUTLINE



**FINAL TEST REPORT +25°C
ASC2807C**

TEST	LIMITS / SN	ACTUAL DATA
GAIN 20 MHz TO 500 MHz	24.0 dB min	25.8
	26.0 dB typ	26.2
GAIN FLATNESS 20 MHz TO 500 MHz	±1.0 dB max	±0.2
SPURIOUS RESPONSE	Accept/Reject	AC
DC CURRENT AT +15 Vdc	500 mA max	395
INPUT VSWR 20 MHz TO 500 MHz	2.0 : 1 max	1.45
OUTPUT VSWR 20 MHz TO 500 MHz	2.0 : 1 max	1.43
NOISE FIGURE 20 MHz TO 100 MHz 100 MHz TO 500 MHz	3.5 dB max	2.33
	2.5 dB max	2.13
P1.0 dB COMPRESSION 20 MHz TO 500 MHz	30.0 dB min	31.6
STABILITY TEST FOR ALL FREQUENCY RANGE WHERE $[S_{21}] > 0$ dB	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM

