

ASC2815C

1000-2000 MHz Cascade Amplifier



Features: (typical values)

- Low Noise Figure 0.6 dB.
- Power Out 15dBm.
- Gain 40 dB.
- No external components required

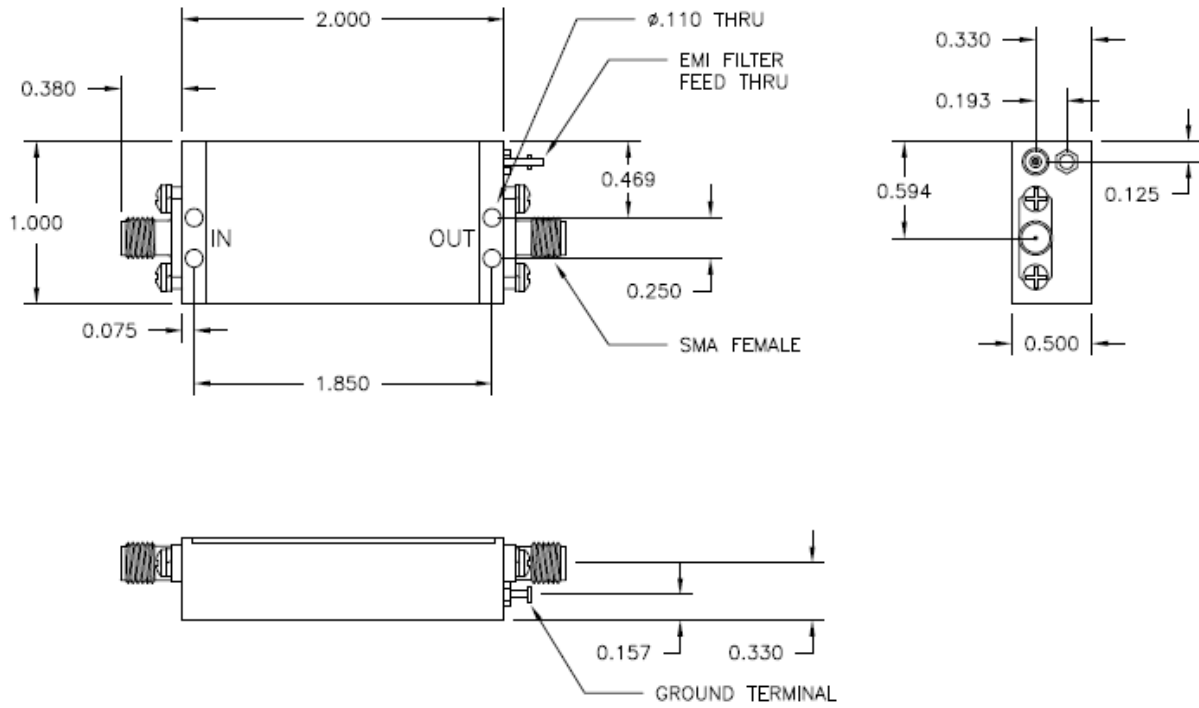
Maximum Ratings

Operating Temperature -20°C to +60°C
 Storage Temperature -20°C to +125°C
 DC Voltage +12.0volts
 RF Input Power - 20 dBm.
 Case Temperature +100°C

Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		1000	2000	MHz.
Gain	40	38		dB.
Gain Flatness	±0.75		±1.6	dB.
Pout @ P1dB	+15	+10		dBm.
Noise Figure	0.6		1.0	dB.
VSWR In/Out	1.8:1		2.0:1	Ratio
Impedance, Input/Output	50 Ohm			
Supply Required	+12/130		+12/150	v/mA.

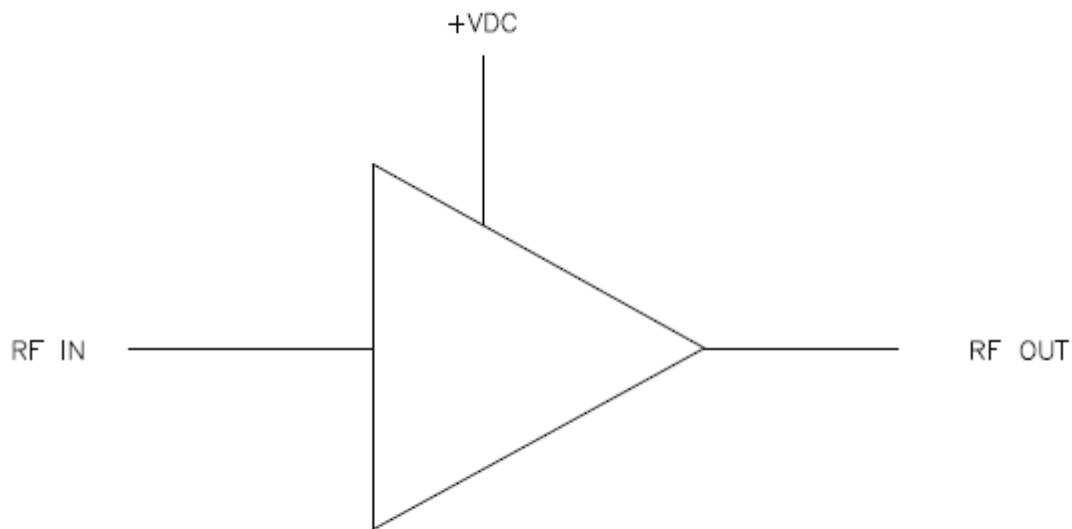
OUTLINE



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

TEST Vdc +12V	LIMITS -20°C/+25°C/+60°C	ACTUAL DATA
Gain 1000 MHz to 2000 MHz	38.0 dB min 40.0 dB typ	41.1 41.9
Gain Flatness 1000 MHz to 2000 MHz	± 1.6 dB max	±0.4
Spurious Response	Accept/Reject	AC
DC Current at +12 Vdc	150 mA max	142
NF	1.0 dB Max	1.0
Input VSWR 1000 MHz to 2000 MHz	2.0 : 1 max	1.8
Output VSWR 1000 MHz to 2000 MHz	2.0 : 1 max	1.8
P 1.0 dB Compression 1000 MHz to 2000 MHz	10.0 dBm min	12.8
Stability Test. For all frequency range where $ S_{21} > 0\text{dB}$	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED