

ASC2849C

5000-6000 MHz Cascade Amplifier



Features: (typical values)

- Bandwidth 5000-6000 MHz.
- Power Out 15 dBm.
- Gain 32 dB.
- Noise Figure..... 1.2 dB.
- No external components required

Maximum Ratings

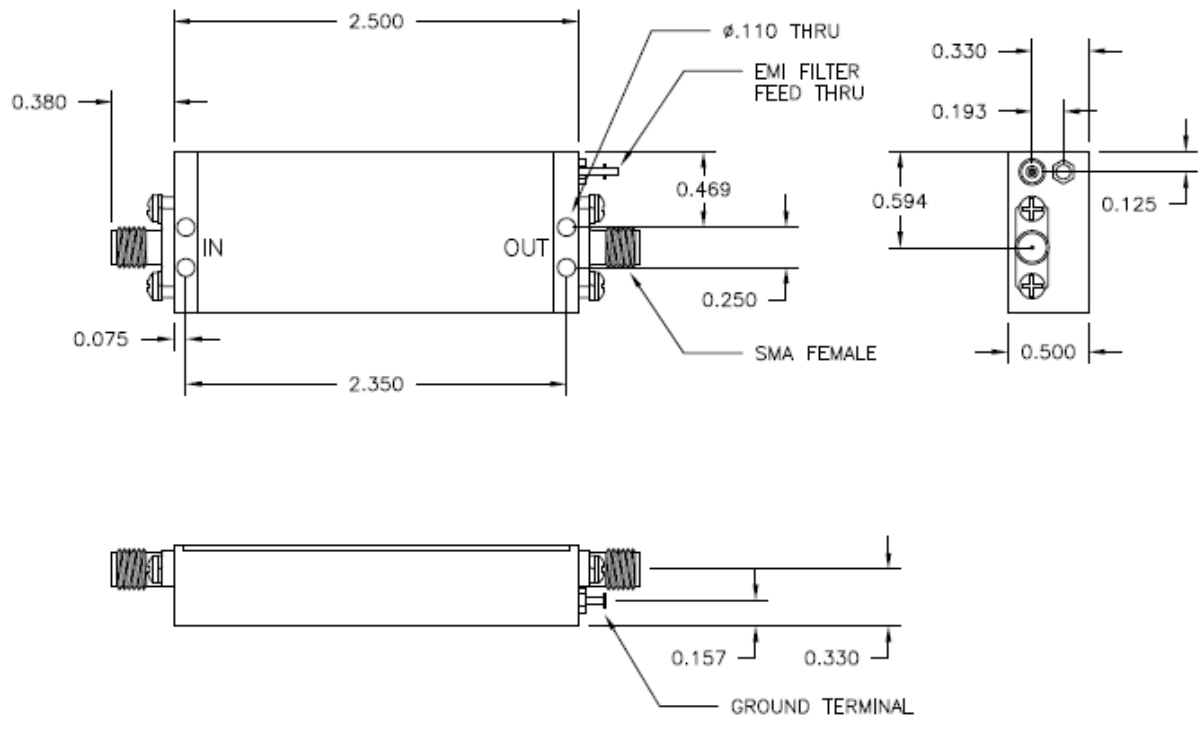
Storage Temperature -62°C to +125°C
 DC Voltage +15 volts
 RF Input Power 30 dBm.
 Case Temperature +100°C

Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		5000	6000	MHz.
Gain	32	30		dB.
Gain Flatness	±0.50		±1.0	dB.
Pout @ 1dB Comp	+15	+10		dBm.
Noise Figure	1.2		1.5	dB.
VSWR In/Out	1.8:1		2.0:1	
Supply Required	+15/150		+15/200	v/mA.
Operating Temperature		0C	50C	Deg
Non-Operating Temperature		-55C	85C	Deg
Impedance In/Out	50 Ohms			

Min. and max. Values are from 0°C to +50°C
 Internal limiting diode requires

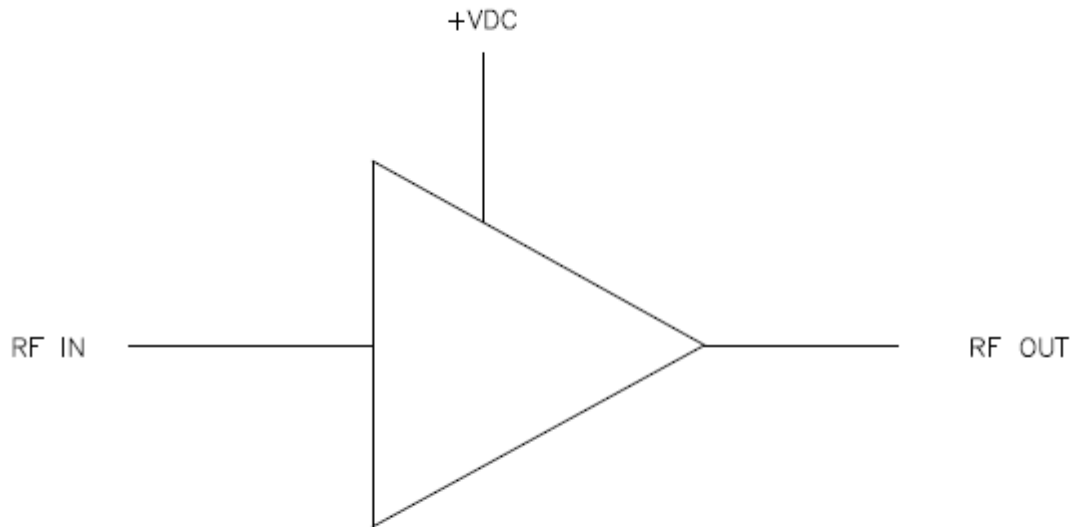
OUTLINE



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

TEST Vdc +15V	LIMITS 0°C/+25°C/+50°C	ACTUAL DATA
Gain 5000 MHz to 6000 MHz	30.0dB min 32.0 dB typ	36.0 36.7
Gain Flatness 5000 MHz to 6000 MHz	± 1.0 dB max	± 0.35
Spurious Response	Accept/Reject	AC
DC Current at +15 Vdc	200 mA max	91
Input VSWR 5000 MHz to 6000 MHz	2.0 : 1 max	1.69
Output VSWR 5000 MHz to 6000 MHz	2.0 : 1 max	1.84
Noise Figure 5000 MHz to 6000 MHz	1.5 dB max	1.08
P 1.0 dB Compression 5000 MHz to 6000 MHz	10.0 dBm min	13.2
Stability Test. For all frequency range where $ S_{21} > 0\text{dB}$	0 dB max	<0
RF Input Power @ 5.5 ghz	+30dbm Max	AC

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED