

ASC2761C

**4000 - 8000 MHz
Cascade Amplifier**



Features: (typical values)

- Bandwidth 4000-8000 MHz.
- Power Out 24 dBm.
- Gain 23 dB.
- Noise Figure..... 3.5 dB.
- IP₃ 35 dBm.
- No external components required

Maximum Ratings

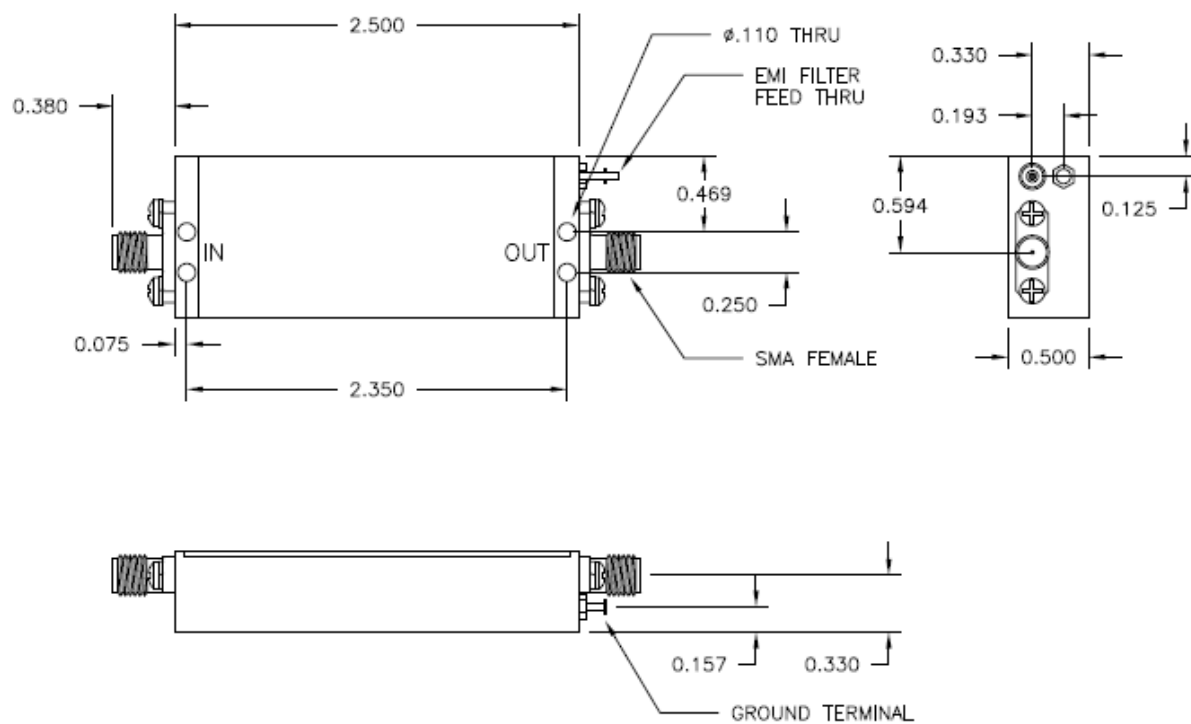
Storage Temperature -62°C to +125°C
 DC Voltage +17 volts
 RF Input Power +30 dBm.
 Case Temperature +100°C

Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		4000	8000	MHz.
Gain	23	21.5	24.5	dB.
Gain Flatness	±0.75		±1.0	dB.
Gain Var. over temp	1.0			ΔdB.
Pout @ 1dB Comp	+24	+23		dBm.
Noise Figure	3.5		4.0	dB.
IP3	37	35		dBm.
IP2	47	45		dBm.
VSWR In/Out	1.6:1		1.8:1	
Supply Required	+15/550		+15/600	v/mA.

Min. and max. Values are from -20°C to +75°C
 Limiter is required

OUTLINE



**FINAL TEST REPORT +25°C
ASC2761C**

TEST	LIMITS / SN	ACTUAL DATA
GAIN 4000 MHz TO 8000 MHz	23.5 dB min	26.0
	27.5 dB max	27.3
GAIN FLATNESS 4000 MHz TO 8000 MHz	±1.5 dB max	±0.65
SPURIOUS RESPONSE	ACCEPT/REJECT	AC
DC CURRENT AT +15 Vdc	600 mA max	282
INPUT VSWR 4000 MHz TO 8000 MHz	1.8 : 1 max	1.41
OUTPUT VSWR 4000 MHz TO 8000 MHz	1.8 : 1 max	1.51
NOISE FIGURE 4000 MHz TO 8000 MHz	4.5 dB max	3.36
P1.0 dB COMPRESSION 4000 MHz TO 8000 MHz	+22.0 dBm min	22.3
IP3 WITH POUT= +10 dBm EACH TONE 1) F1/F2=4000/4001MHz, Fc=3999/4002 MHz 2) F1/F2=6000/6001 MHz, Fc=5999/6002 MHz 3) F1/F2=7999/8000 MHz, Fc=7998/8001 MHz	35.0 dBm min	36.0
IP2 WITH POUT= +10 dBm EACH TONE 1) F1+F2=4000MHz +4001MHz, Fc=8001MHz 2) F1-F2=8000MHz-4001Mhz, Fc=3999MHz	45.0 dBm min	47.0
RF INPUT POWER @ 6GHz	+30 dbm max	AC
STABILITY TEST FOR ALL FREQUENCY RANGE WHERE [S21] > 0 dB	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM

