ASC2760C

2000 - 4000 MHz
Cascade Amplifier

Features: (typical values)

- Bandwidth ……..……..... 2000-4000 MHz.
- Power Out ……..…….. 26 dBm.
- Gain ……..…….. 32 dB.
- Noise Figure……... 3.0 dB.
- IP_3 ……..……. 37 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		2000	4000	MHz.
Gain	32	30.5	33.5	dB.
Gain Flatness	±0.75		±1.0	dB.
Gain Var. over temp	1.0			ΔdB.
Pout @ 1dB Comp	+26	+25		dBm.
Noise Figure	3.0		3.5	dB.
IP3	37	35		dBm.
IP2	52	50		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

3009 Old State Rd, Telford, PA 18969 Phone: 215-799-2561 Fax: 215-799-2563
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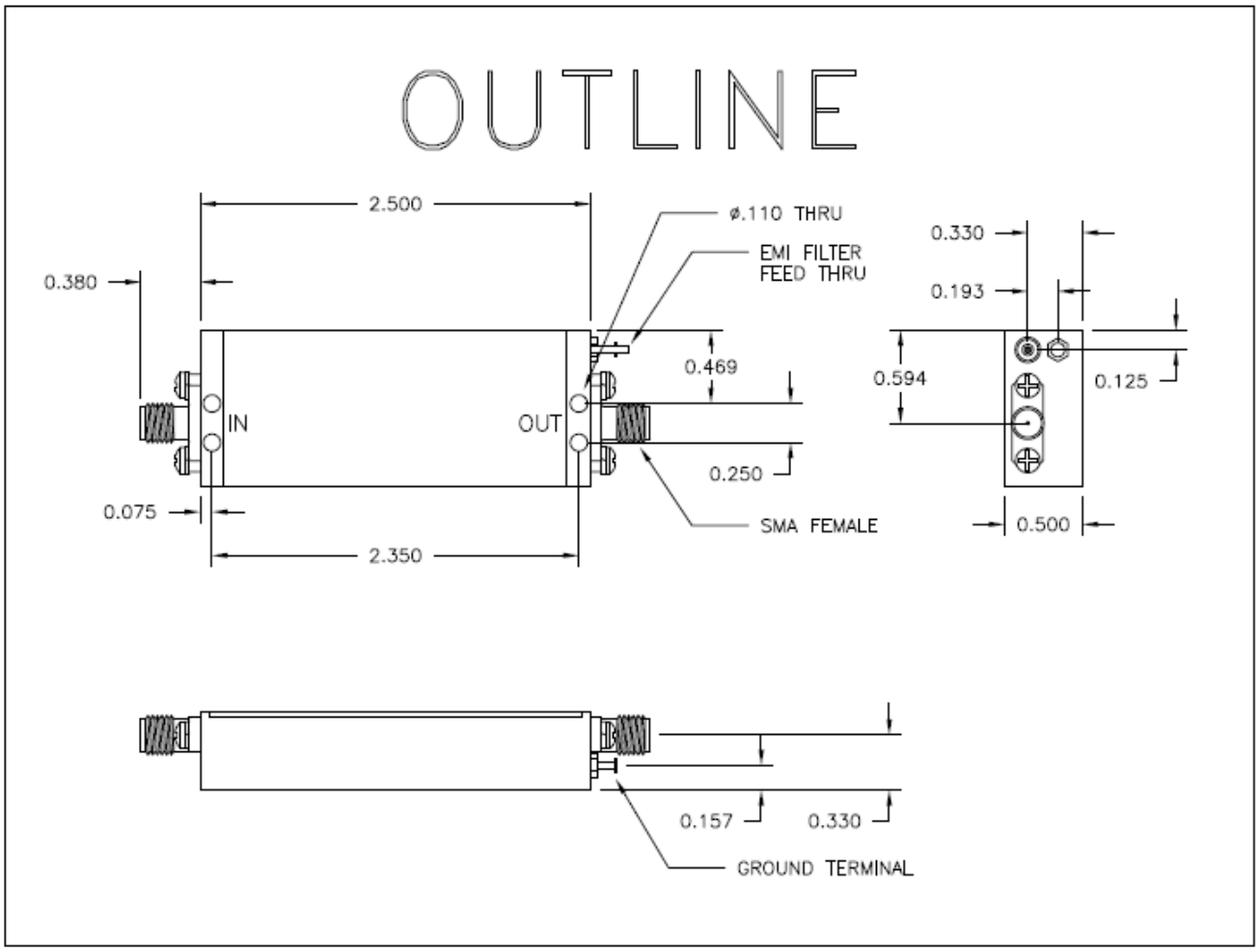

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FINAL TEST REPORT +25ºC
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TEST	LIMITS / SN	ACTUAL DATA
GAIN 2000 MHz TO 4000 MHz	30.5 dB min	31.6
	33.5 dB max	32.2
GAIN FLATNESS 2000 MHz TO 4000 MHz	±1.0 dB max	±0.3
DC CURRENT AT +15 Vdc	600 mA max	388
INPUT VSWR 2000 MHz TO 4000 MHz	2.0 : 1 max	1.76
OUTPUT VSWR 2000 MHz TO 4000 MHz	2.0 : 1 max	1.78
NOISE FIGURE 2000 MHz TO 4000 MHz	3.5 dB max	2.9
P1.0 dB COMPRESSION 2000 MHz TO 4000 MHz	+25.0 dBm min	27.0
IP3 WITH POUT=+12.0 dBm EACH TONE 1) F1/F2=2000/2001 MHz, Fc=1999/2002 MHz 2) F1/F2=3000/3001 MHz, Fc=2999/3002 MHz 3) F1/F2=3999/4000 MHz; Fc=3998/4001 MHz	35.0 dBm min	37.5
IP2 WITH POUT=+12.0 dBm EACH TONE 1) F1+F2=2000 +2001 MHz, Fc= 4001 MHz 2) F2 -F1=4000 - 2001 MHz, Fc=1999 MHz	50.0 dBm min	52.0
MAXIMUM INPUT POWER: no significant change in NF After +30 dBm @ 2500 MHz applied to RF input	NO CHANGE IN NF	NC
SPURIOUS RESPONSE	ACCEPT/REJECT	AC
STABILITY TEST FOR ALL FREQUENCY RANGE WHERE [S21] > 0 dB	0 dB max	<0

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FUNCTIONAL BLOCK DIAGRAM