

## RF Amplifier

(With Heatsink and Cable Assembly)

- \* **Operating Frequency : 10-300 MHz.**
- \* **Gain : 16 dB.**
- \* **PIdB : 31 dBm.**
- \* **No external components required**



### ELECTRICAL SPECIFICATION @ VDD= +15 VDC; Temp. = 25°C, 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	10		300	MHz.
Gain	G	15	16	17	dB.
Gain Flatness	$\Delta G$		$\pm 0.50$	$\pm 0.75$	dB.
Noise Figure	N.F.		5	7	dB.
Output Power	P1dB	30	31		dBm.
IP3 @ 15dBm output per tone 5MHz apart	IP3	40	45		dBm.
VSWR In	VSWR1		1.8:1	2.0:1	Ratio
VSWR Out	VSWR2		1.8:1	2.0:1	Ratio
Operating Voltage	Vdc		15		Volt
Operating Current	Id		270	350	mA.

### MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimension	2.0 x 1.0 x 0.5		in.
Connectors	SMA Female		
Cooling	Heatsink		

### PROTECTION

		Max	Units
RF Input Power		24	dBm.
Reverse Polarity Protection	Optional		
Load VSWR	Infinite up to 1W		
Stability	100% Tested		

### ENVIRONMENTAL CHARACTERISTICS

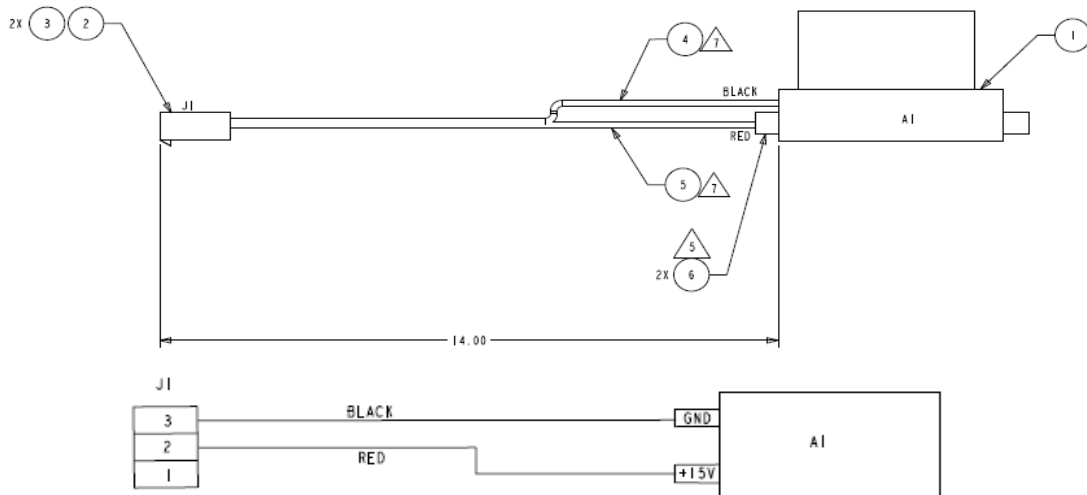
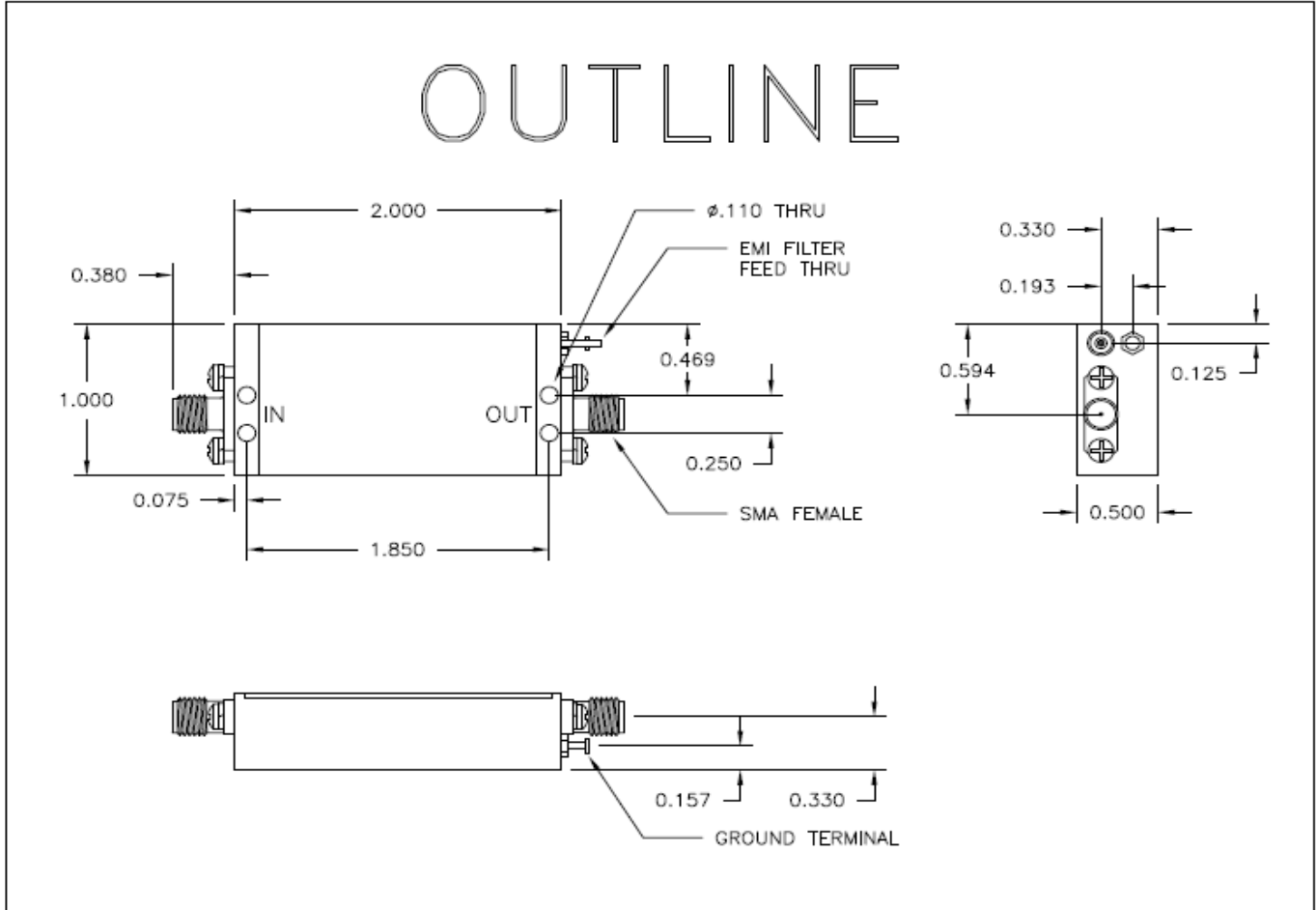
Parameter	Symbol	Min.	Typ.	Max.	Units
Operating Case Temperature	Tc	-40°C		85°C	°C
Storage Temperature	Tstg	- 55°C		120°C	°C

<b>DESCRIPTION: ASC2692C-CA</b>
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**FINAL ELECTRICAL TEST REPORT**  
**RECORD DATA @ +25°C ONLY**

<b>TEST</b> Vdc +15V	<b>LIMITS</b> -40°C/+25°C/+85°C	<b>ACTUAL</b> <b>DATA</b>
Gain 10 MHz to 300 MHz	15.0 dB Min 16.0 dB Typ 17.0 dB Max	15.6 16.1
Gain Flatness 10 MHz to 300 MHz	± 0.75 dB max	± 0.25
Spurious Response	Accept/Reject	AC
DC Current at +15 Vdc	600 mA max	270
Input VSWR 10 MHz to 300 MHz	2.0 : 1 max	1.6
Output VSWR 10 MHz to 300 MHz	2.0 : 1 max	1.53
Noise Figure 10 MHz to 300 MHz	7.0 dB max	2.33
P 1.0 dB Compression 10 MHz to 300 MHz	30.0 dBm min	30.8
IP3 with Pout = +15.0 dBm each tone 1) F1/F2=10/11 MHz, Fc=9/12 MHz 2) F1/F2=300/301 MHz, Fc=299/302 MHz	40.0 dBm Min	44.0
Stability Test. For all frequency range where $ S_{21}  > 0\text{dB}$	0 dB max	<0

Outline Drawing



3009 Old State Rd, Telford, PA 18969

FUNCTIONAL BLOCK DIAGRAM

