Microwave Amplifier
22 to 23 GHz
Model BX9823

FEATURES

- **High Gain: 21 dB: Typical**
- **Reverse Bias Protection**
- **Input Voltage Regulator**
- **Laser Sealed Housing**

The Model BX9823 is standard high frequency amplifier covering 22 GHz to 23 GHz. This two stage design, utilizes an input voltage regulator to protect against fluctuations in supply voltage, reverse bias protection circuitry, and a laser sealed housing for the ultimate in environmental protection. This standard design may also be ordered in a screened MIL-STD-883 version as a model SX9823. All specification ratings are based on measurements in a 50 ohm system with a DC supply voltage tolerance of +/- 2%.

Parameter	Typical	Min. / Max.
Frequency Range	22 to 23 GHz	22 to 23 GHz
Gain	19 to 23 dB	18 dB / 24 dB
Gain Flatness (+/-)	0.5 dB	1.0 dB Max.
Gain Variation over Temp.	1.0 dB	1.5 dB Max
P_{out} @ 1 dB Compression	14 dBm	13 dBm
Input VSWR	1.8:1	2.0:1 Max.
Output VSWR	1.8:1	2.0:1 Max.
3rd Order Output Intercept Point	-	-
2nd Order Output Intercept Point	-	-
Noise Figure	4.0 dB	5.0 dB
Supply Voltage	+12 to +15 volts	+12 to +15 volts
Supply Current	290 mA	300 mA Max.
Revision: 6/6/2012	Typical values are measured at 25°C but not guaranteed.	
Housing Size	0.89" L x 1.18" W x 0.46" H	
RF Connectors	Gold Plated Pins or SMA Female	
Operating Case Temp. (Min./Max. Values)	25°C to +75°C	

Maximum (No Damage) Ratings	
Storage Temperature	-65°C to +125°C
Operating Temperature (Case)	-40°C to +85°C
DC Voltage @ 25°C (Regulated)	+17 VDC
Input Drive @ 25°C (CW)	+20 dBm

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SHT	REV
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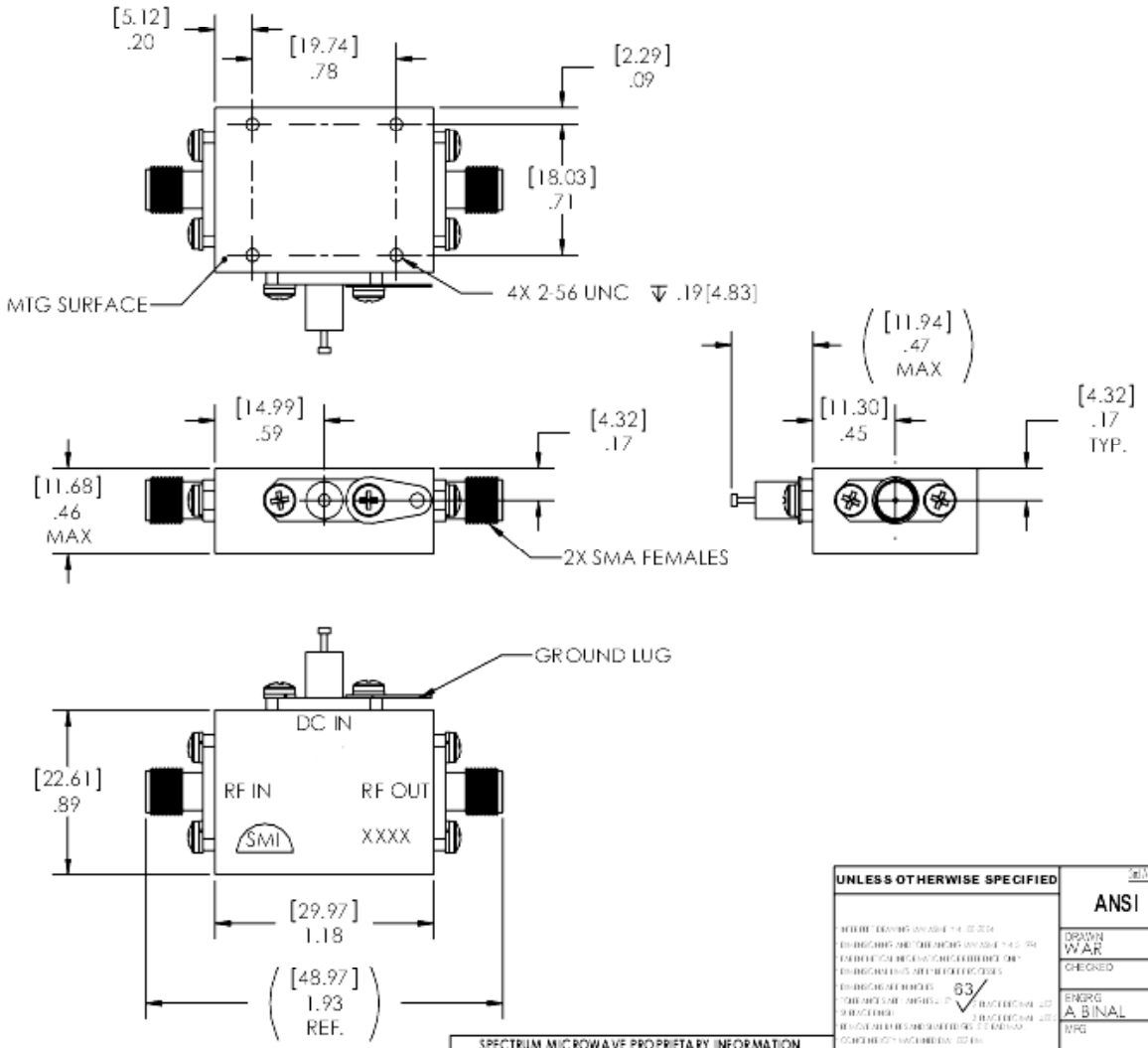
REVISIONS				
ECN	REV.	DESCRIPTION	CHNG/DATE	APPVD/DATE
XXX	P1	PRELIMINARY RELEASE	2012/05/02	

NOTES:

1. MATERIAL: ALUMINUM NICKEL PLATED



CAUTION

THIS ASSEMBLY CONTAINS PARTS SENSITIVE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD). USE ESD PRECAUTIONARY PROCEDURES WHEN TOUCHING, REMOVING OR INSERTING

SEE SEPARATE PARTS LIST IN ELECTRONIC STORAGE

UNLESS OTHERWISE SPECIFIED
63
DO NOT SCALE DRAWING

3RD ANGLE PROJECTION
ANSI

DRAWN	WAR	DATE 2012/05/02
CHECKED		
ENGR'G	A. BINAL	2012/05/02
MFG		
QA		

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TITLE:

SIZE	CAGE CODE	DWG NO.	REV
B	60979		P1

SCALE: 1.5:1 SHEET 1 OF 1

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