

2 GHz to 6 GHz, 44 dB Gain Broadband High Gain Amplifier with 2 Watt and SMA

SBBA-060-44-02-SMA is a 2W wideband coaxial power amplifier operating in the 2 to 6 GHz frequency range. The amplifier offers 33 dBm min of P1dB and high 44 dB typical small signal gain with the excellent gain flatness of ± 1.0 dB max and an outstanding output IP3 performance of 42 dBm. This excellent technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. The amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The amplifier operates over the temperature range of -55°C and +85°C.

Electrical Specifications (TA = +25°C, DC Voltage = 15Volts, DC Current = 1,750mA)

Description	Min	Typ	Max	Unit
Frequency Range	2		6	GHz
Gain		44		dB
Gain Flatness		± 1		dB
P1dB	+33			dBm
IP3		+42		dBm
Reverse Isolation		50		dB
Noise Figure		5	5.5	dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11		15	Volts
Operating DC Current		1,750		mA
Operating Temperature Range (OTR)	-55		+85	°C

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-30 to +70	°C
Storage Temperature	-55 to +85	°C



ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.



Features:

- 2 GHz to 6 GHz Frequency Range
- P1dB: 33 dBm min
- High Small Signal Gain: 44 dB typical
- Gain Flatness: ± 1.0 dB
- High output IP3: 42 dBm
- Noise Figure: 5 dB typical
- Reverse Isolation: 50 dB
- 50 Ohms Input and Output Matched
- -55 to +85°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

Applications:

- Electronic Warfare
- Electronic Countermeasures
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communication
- Microwave Radio Systems
- Driver Amplifier
- High Power Output Amplifier

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Configuration

- Connector 1 SMA Female
- Connector 2 SMA Female

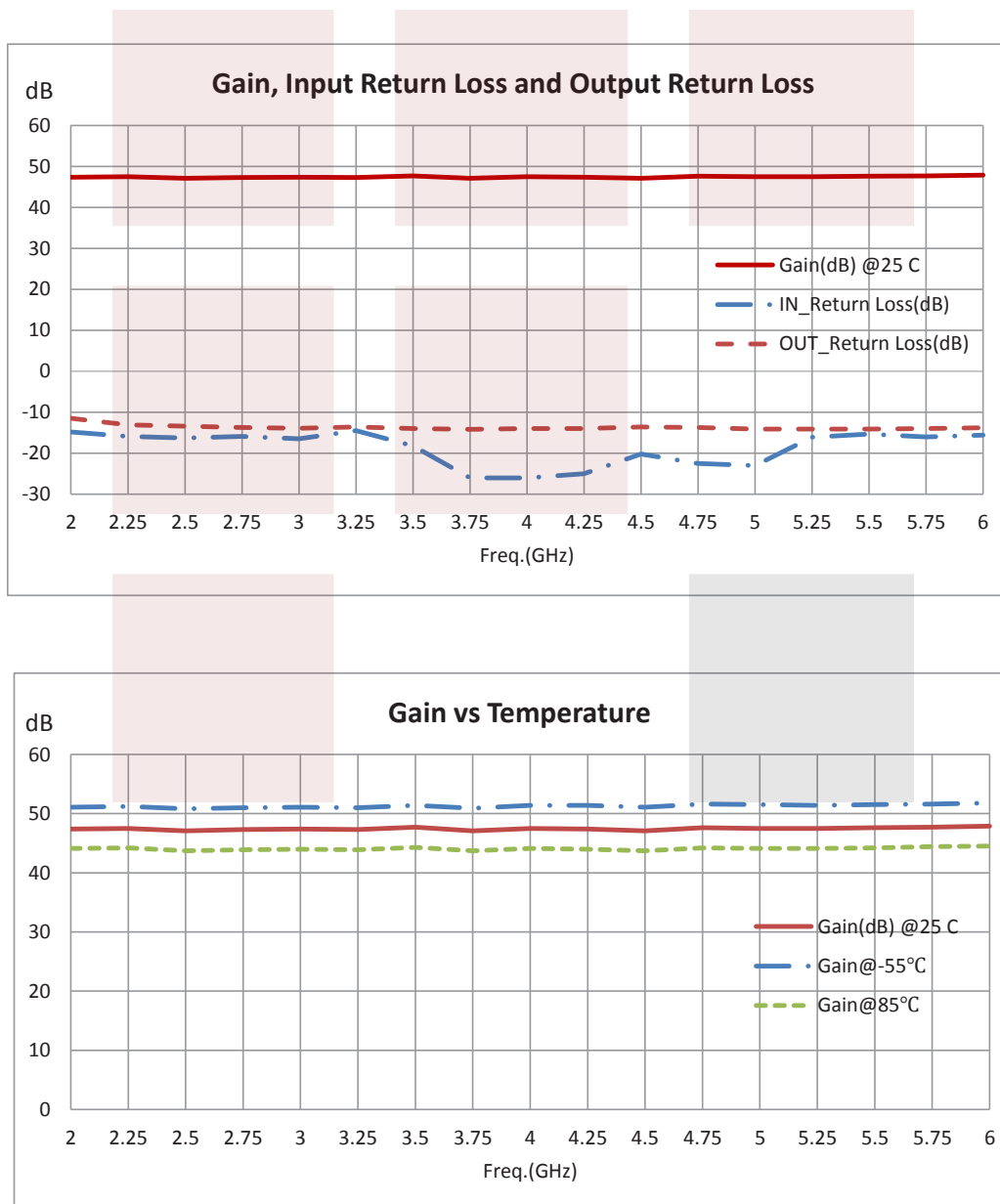
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

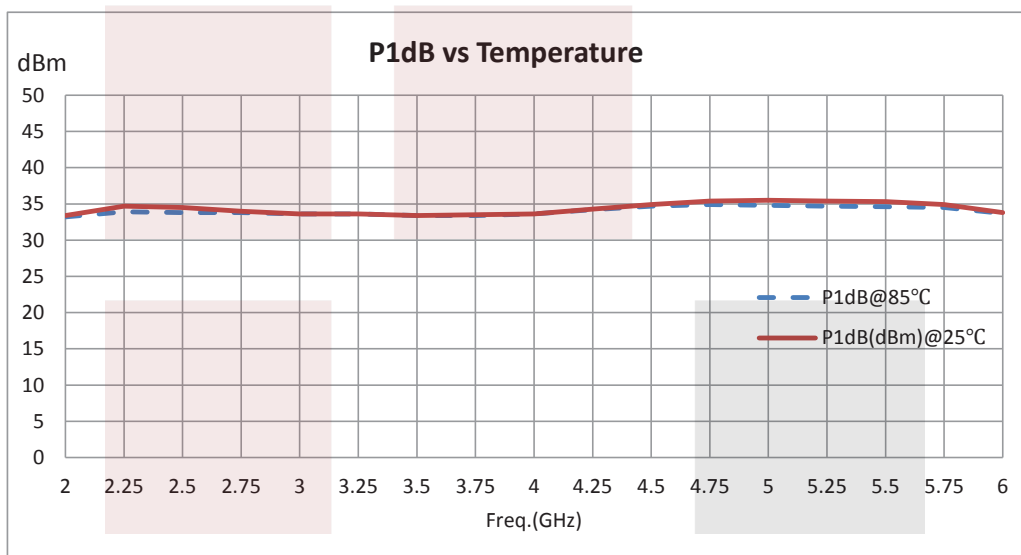
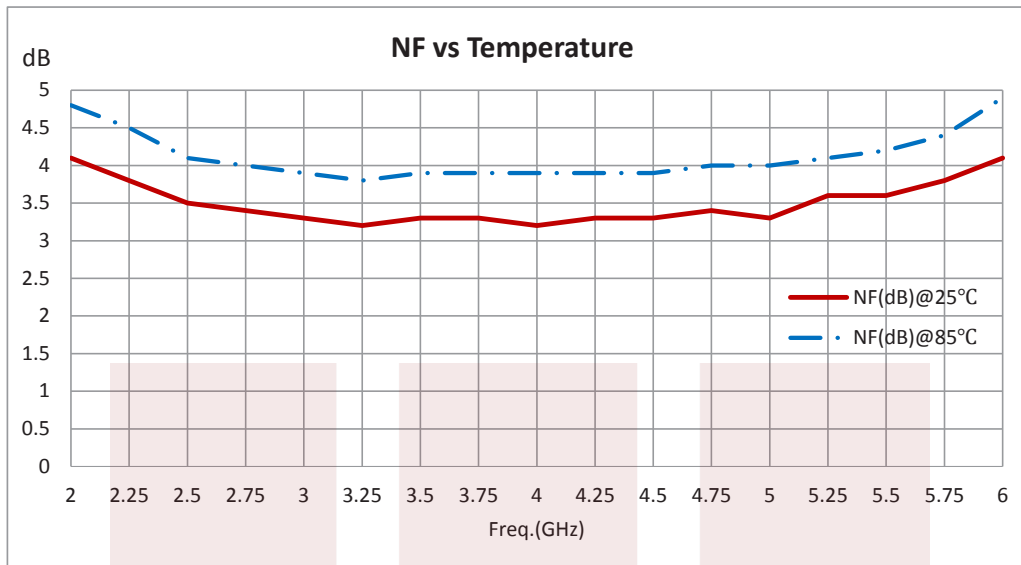
Plotted and Other Data

Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.

Power Data



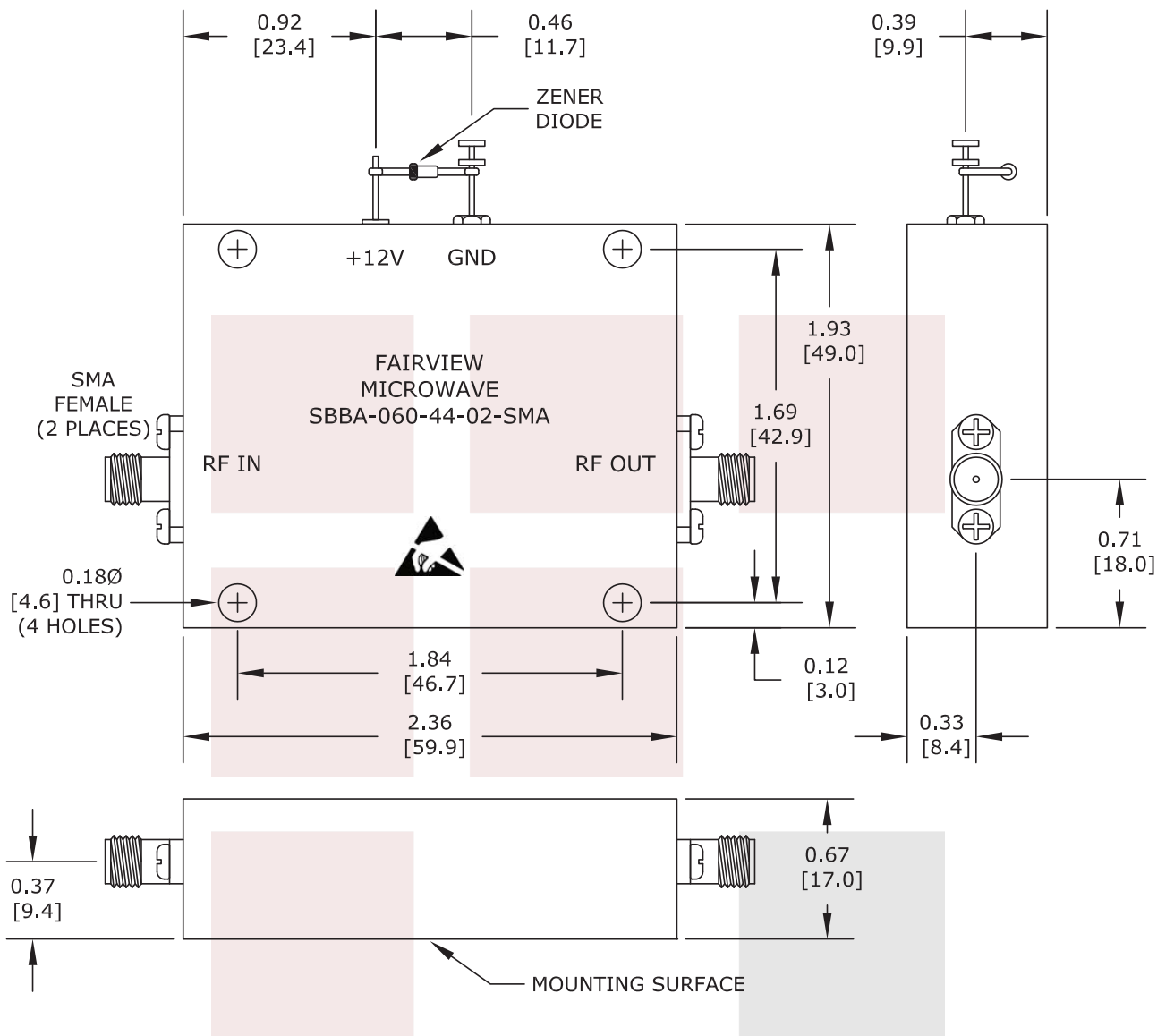


2 GHz to 6 GHz, 44 dB Gain Broadband High Gain Amplifier with 2 Watt and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2 GHz to 6 GHz, 44 dB Gain Broadband High Gain Amplifier with 2 Watt and SMA SBBA-060-44-02-SMA](http://www.fairviewmicrowave.com/2-6-ghz-broadband-high-gain-amplifier-sbba-060-44-02-sma-p.aspx)

URL: <http://www.fairviewmicrowave.com/2-6-ghz-broadband-high-gain-amplifier-sbba-060-44-02-sma-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

FAIRVIEW MICROWAVE INC.
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE
2 GHz to 6 GHz, 44 dB Gain Broadband High Gain
Amplifier with 2 Watt and SMA

DWG NO
SBBA-060-44-02-SMA

CAGE CODE
3FKR5

CAD FILE 050914

SHEET

SCALE N/A

SIZE A

2233