

26 dB Gain Block Amplifier Operating From 50 MHz to 4 GHz with 23 dBm P1dB and SMA

The SPA-040-26-002-SMA is wideband general purpose RF coaxial gain block amplifier operating in the 0.05 GHz to 4 GHz frequency range. The amplifier offers 23 dBm of P1dB, 26 dB of Gain, IP3 of 35 dBm. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. This gain block amplifier requires only a single positive supply, typically a +12V DC power supply and includes built-in voltage regulation, is unconditionally stable and operates over the temperature range of -40°C and +75°C.

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 120mA)

Description	Min	Typ	Max	Unit
Frequency Range	0.05		4	GHz
Small Signal Gain	24	26	28	dB
Gain Flatness		±1	±1.25	dB
Gain Variance at OTR*			±1	dB
Output at 1 dB Compression Point		+23		dBm
Output 3rd Intercept Point	+32	+35		dBm
Noise Figure		5	6	dB
Input VSWR		1.6:1	1.8:1	
Output VSWR		1.6:1	1.8:1	
Reverse Isolation	45	55		dB
Operating DC Voltage	11.5	12	13	Volts
Operating DC Current		120	220	mA
Operating Temperature Range	-40		+75	°C

*OTR= Base Plate Operating Temperature Range

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+13	Volts
RF input Power	+10	dBm
Operating Temperature (base-plate)	-40 to +75	°C
Storage Temperature	-55 to +125	°C



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

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.



Features:

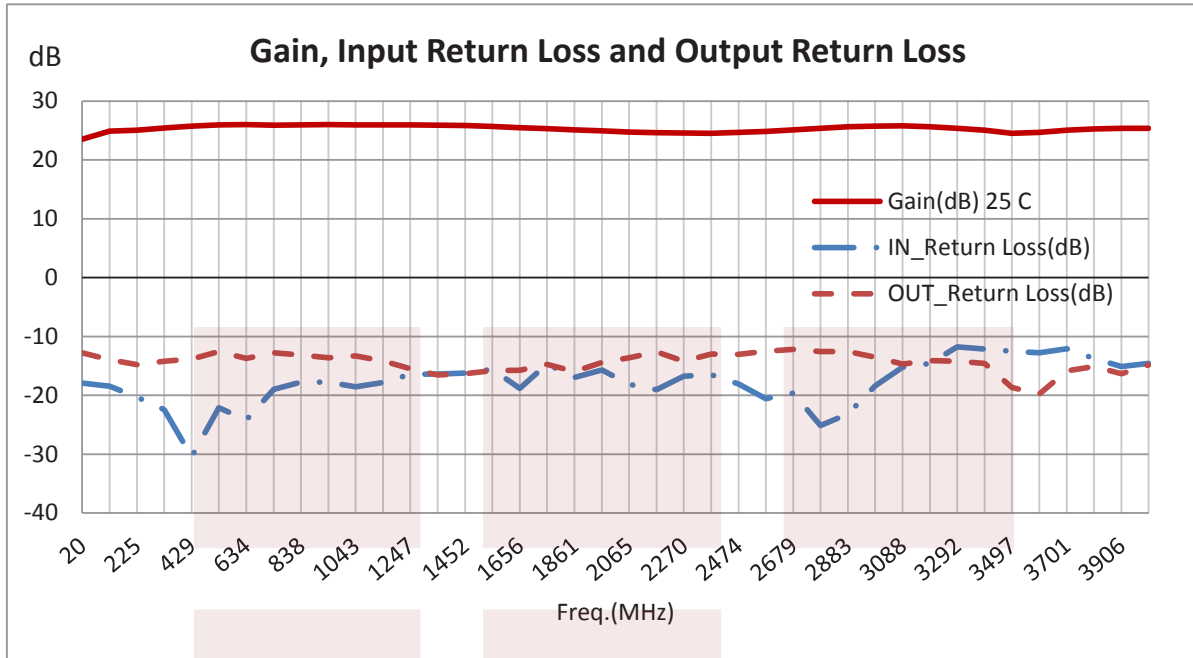
- 50 MHz to 4 GHz Frequency Range
- P1dB: 23 dBm
- High Small Signal Gain: 26 dB
- IP3: 35 dBm
- 50 Ohm Input and Output Matched
- -40 to +75°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

Applications:

- Laboratory Applications
- R&D Labs
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- RF Pre-amplification

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Power Data

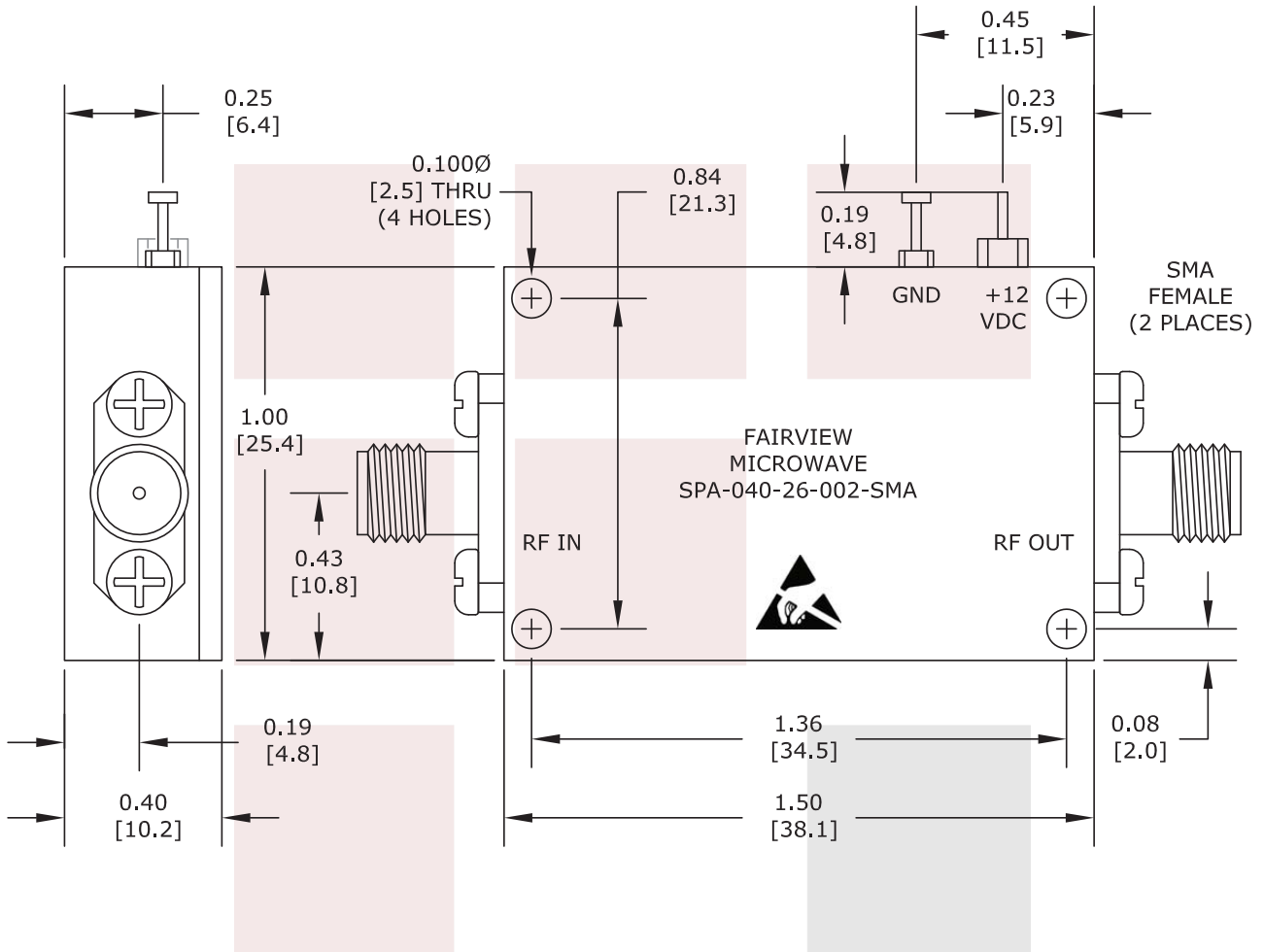


26 dB Gain Block Amplifier Operating From 50 MHz to 4 GHz with 23 dBm P1dB and SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [26 dB Gain Block Amplifier Operating From 50 MHz to 4 GHz with 23 dBm P1dB and SMA SPA-040-26-002-SMA](#)

URL: <http://www.fairviewmicrowave.com/26-db-gain-block-amplifier-4-ghz-spa-040-26-002-sma-p.aspx>

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TITLE 26 dB Gain Block Amplifier Operating From 50 MHz to 4 GHz with 23 dBm P1dB and SMA		DWG NO SPA-040-26-002-SMA	CAGE CODE 3FKR5		
CAD FILE 082914	SHEET	SCALE N/A	SIZE A	2233	