SBP-4035533026-VFVF-S1

Rev 1.0

Coaxial Power Amplifier, 40 to 55 GHz, 30 dB Gain, +26 dBm P_{1db}

Description:

Model SBP-4035533026-VFVF-S1 is a power amplifier with a typical small signal gain of 30 dB and a nominal P_{1dB} of +26 dBm in the frequency range of 40 to 55 GHz. The DC power requirement for the amplifier is +8 V_{DC}/1850 mA. The input and output ports are both female V connectors. Other port configurations, such as inline and right-angle waveguides, are also available under different model numbers.

Features:

- Broadband Performance
- High Output Power
- High Gain

Applications:

- Radar Systems
- 5G Systems
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	40 GHz		55 GHz
Gain		30 dB	
P_{1dB}		+26 dBm	
P_{SAT}		+27 dBm	
P_{in}			-3 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V_{DC}	+8 V_{DC}	+12 V_{DC}
DC Supply Current		1850 mA	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

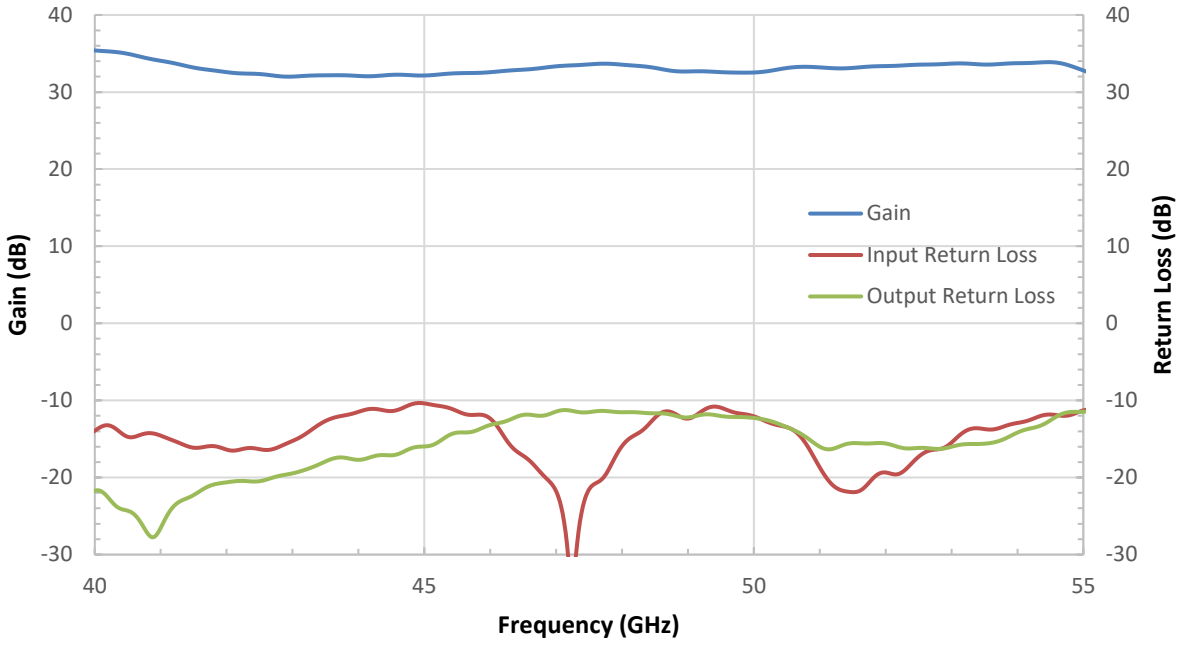
Item	Specification
Input Port	V(F)
Output Port	V(F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20” (W) 1.20” (L) X 0.50” (H)
Outline	BG-SC-1

www.sagemillimeter.com | 501 Amapola Ave, Torrance, CA 90501
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Coaxial Power Amplifier, 40 to 55 GHz, 30 dB Gain, +26 dBm P_{1db}

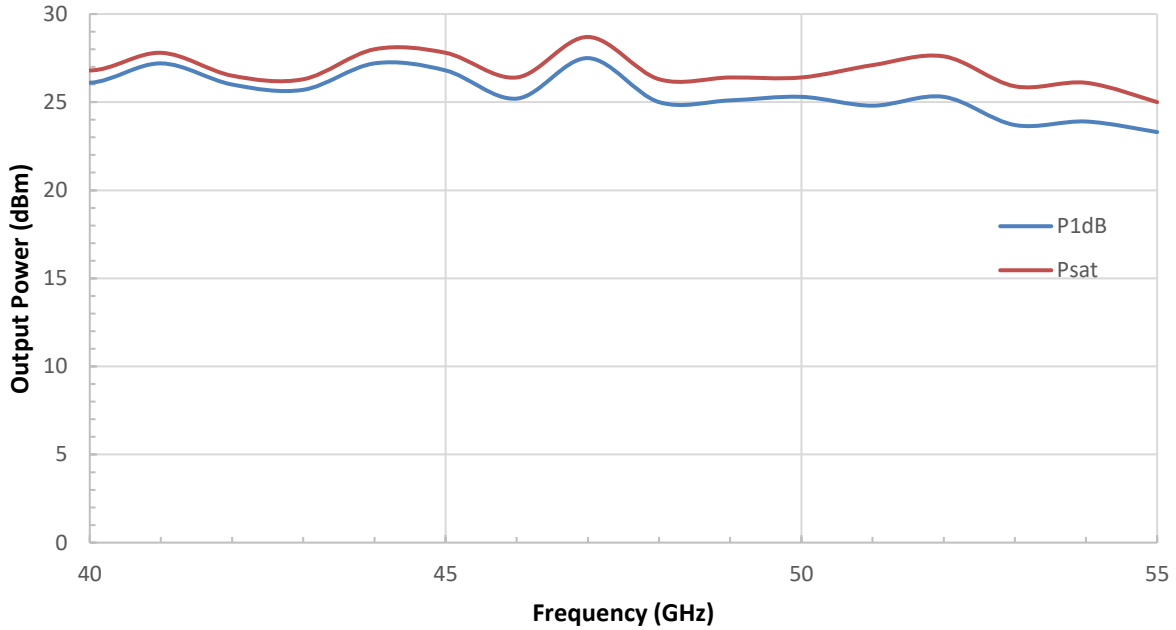
Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/1,815 mA



Output Power vs. Frequency

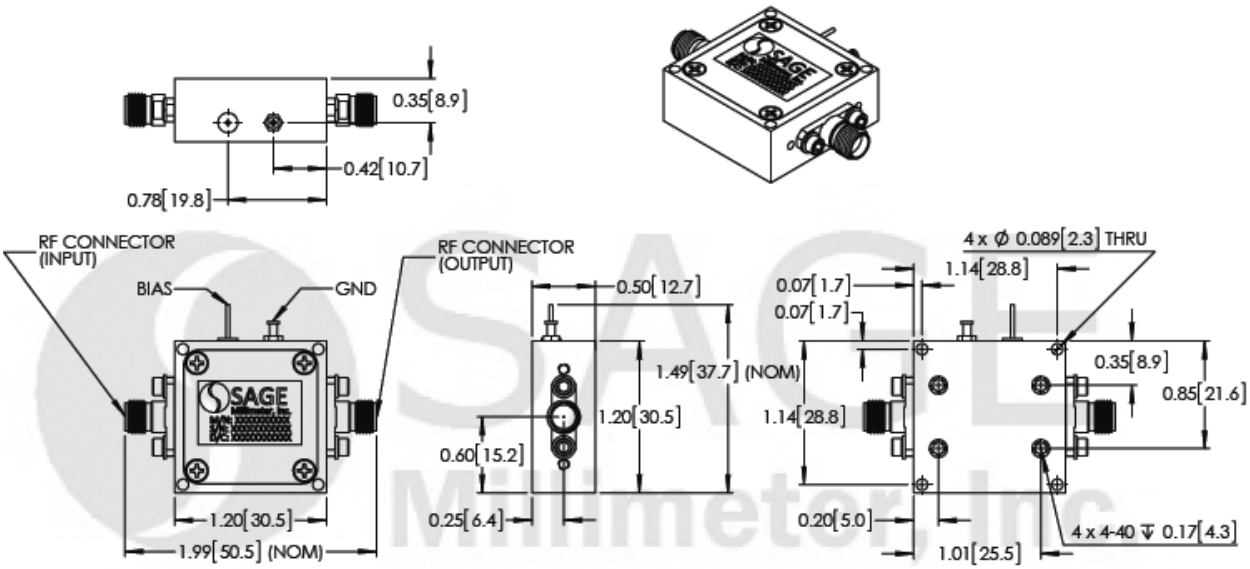
Bias: +8 V_{DC}/1,815 mA
RFsat: +8Vdc/2,750 mA



www.sagemillimeter.com | 501 Amapola Ave, Torrance, CA 90501
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Coaxial Power Amplifier, 40 to 55 GHz, 30 dB Gain, +26 dBm P_{1db}

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25˚C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed +50˚C. Use proper heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**