SBP-2332633533-KFKF-E1-HR

Rev 1.0

K-Band Power Amplifier, 23 to 26 GHz, 35 dB Gain, +33 dBm P_{1dB}

Description:

Model SBP-2332633533-KFKF-E1-HR is a power amplifier with a typical small signal gain of 35 dB and a nominal P_{1dB} of +33 dBm across the frequency range of 23 to 26 GHz and comes with heatsink attached. The DC power requirement for the amplifier is +8 V_{DC}/3.5 A. The RF connectors are 2.92 mm (K) for input and output ports. Other port configurations, such as 2.4 mm or 2.92 mm male connectors are also available under different model numbers.

Features:

- Regulator and Heatsink Attached
- High Output Power
- Extreme Gain Flatness

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	23 GHz		26 GHz
Gain		35 dB	
P_{1dB}		+33 dBm	
P_{sat}		+34 dBm	
P_{in}			+20 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+7.5 V_{DC}	+8.0 V_{DC}	+12.0 V_{DC}
DC Supply Current		3.5 A	
Supply Voltage to Fan		+12.0 V_{DC}	
Specification Temperature		+25 ˚C	
Operating Temperature	0 ˚C		+50 ˚C

Mechanical Specifications:

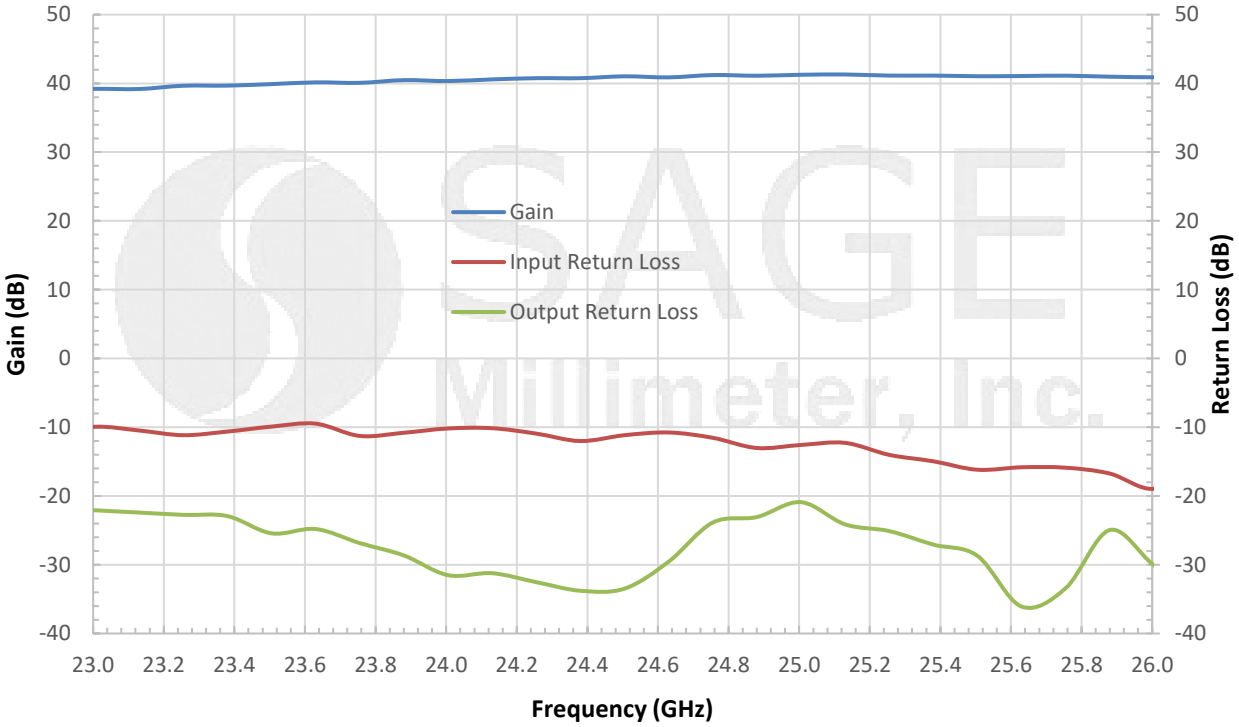
Item	Specification
Input Port	2.92 mm (K) Female
Output Port	2.92 mm (K) Female
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.07 lb
Size	3.15” (W) X 3.15” (L) X 3.48” (H)
Outline	BK-SC-C1-H

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

K-Band Power Amplifier, 23 to 26 GHz, 35 dB Gain, +33 dBm P_{1dB}

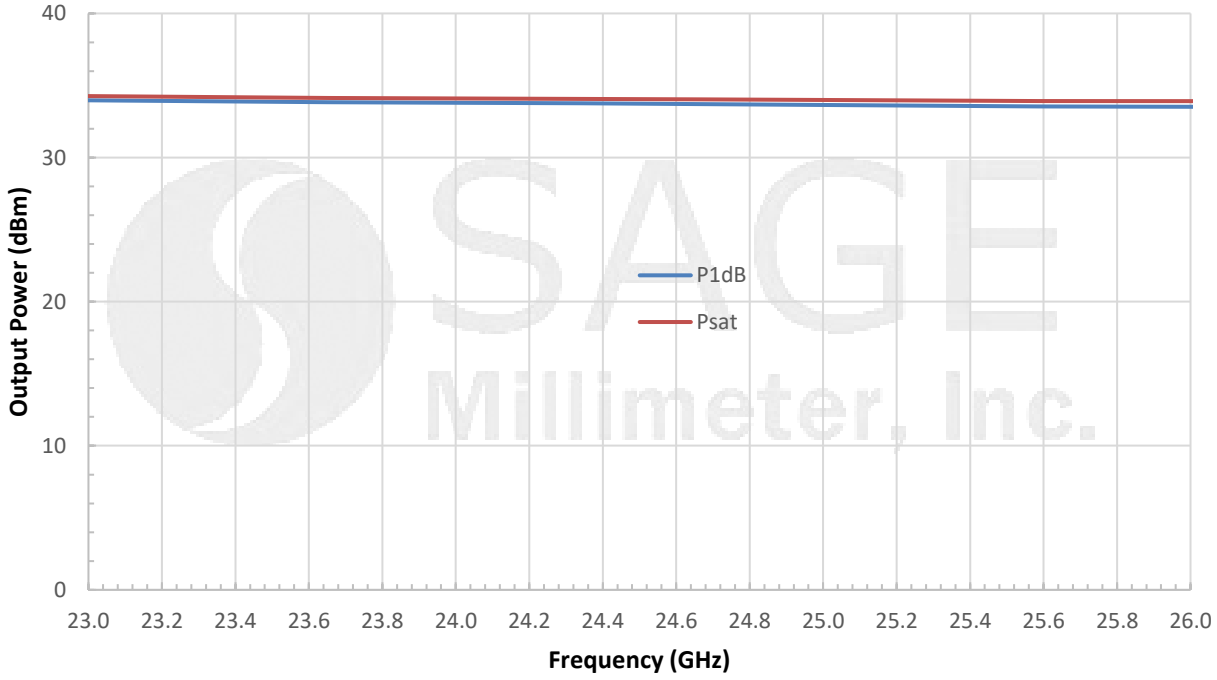
Typical Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/3.2 A



Typical Output Power vs. Frequency

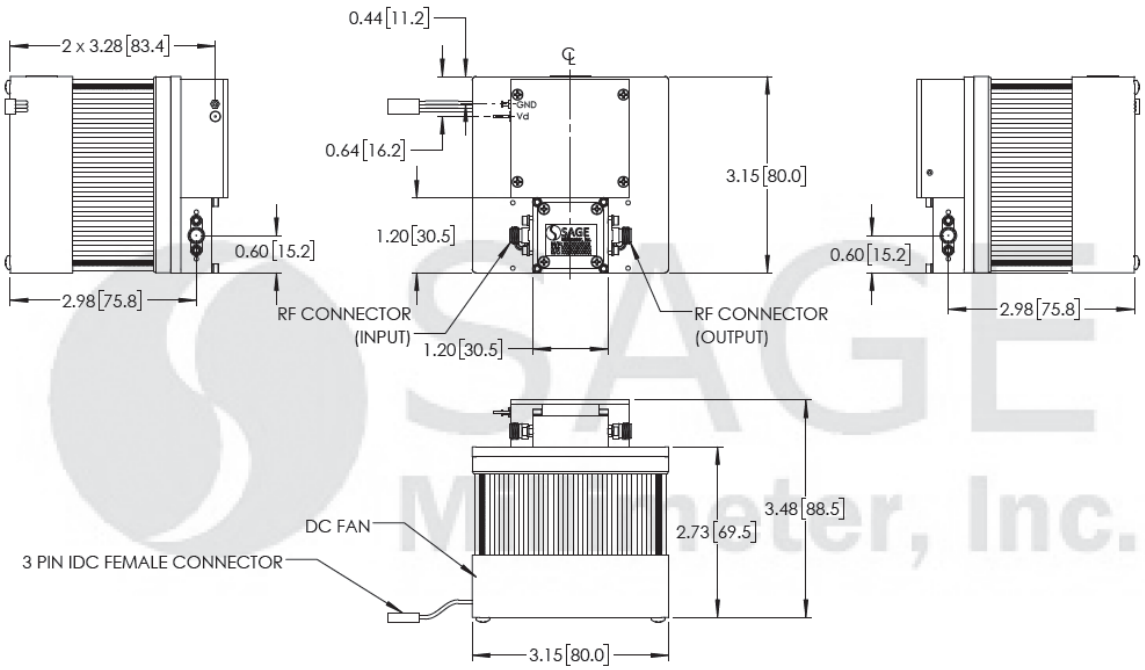
Bias: +8 V_{DC}/4.0 A



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

K-Band Power Amplifier, 23 to 26 GHz, 35 dB Gain, +33 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.
- The RF ports are readily be configured by using **Uni-Guide™** waveguide connectors under various model numbers.
- 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 +85 ˚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.**