



Q-Band Power Amplifier, 33 to 50 GHz, 30 dB Gain, +18 dBm P_{1dB}

Description:

Model SBP-3335033018-2F2F-S1 is a power amplifier with a typical small signal gain of 30 dB and a nominal P_{1dB} of +18 dBm across the frequency range of 33 to 50 GHz. The DC power requirement for the amplifier is +8 V_{DC}/650 mA. The input and output port configurations are both female 2.4 mm connectors. Other port configurations, such as male 2.4 mm connectors and WR-22 waveguides for either the input or output port, are also available under different model numbers.



Features:

- Full Waveguide Band Coverage
- High Output Power
- High Gain

Applications:

- Radar Systems
- Communication Systems
- Test Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	33 GHz		50 GHz
Gain		30 dB	
P _{1dB}		+18 dBm	
P _{SAT}		+20 dBm	
P _{in}			-1 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage	+6 V _{DC}	+8 V _{DC}	+15 V _{DC}
DC Supply Current		650 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
Input Port	2.4 mm (F)
Output Port	2.4 mm (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.20" (W) X 1.20" (L) X 0.50" (H)
Outline	BG-SC-1

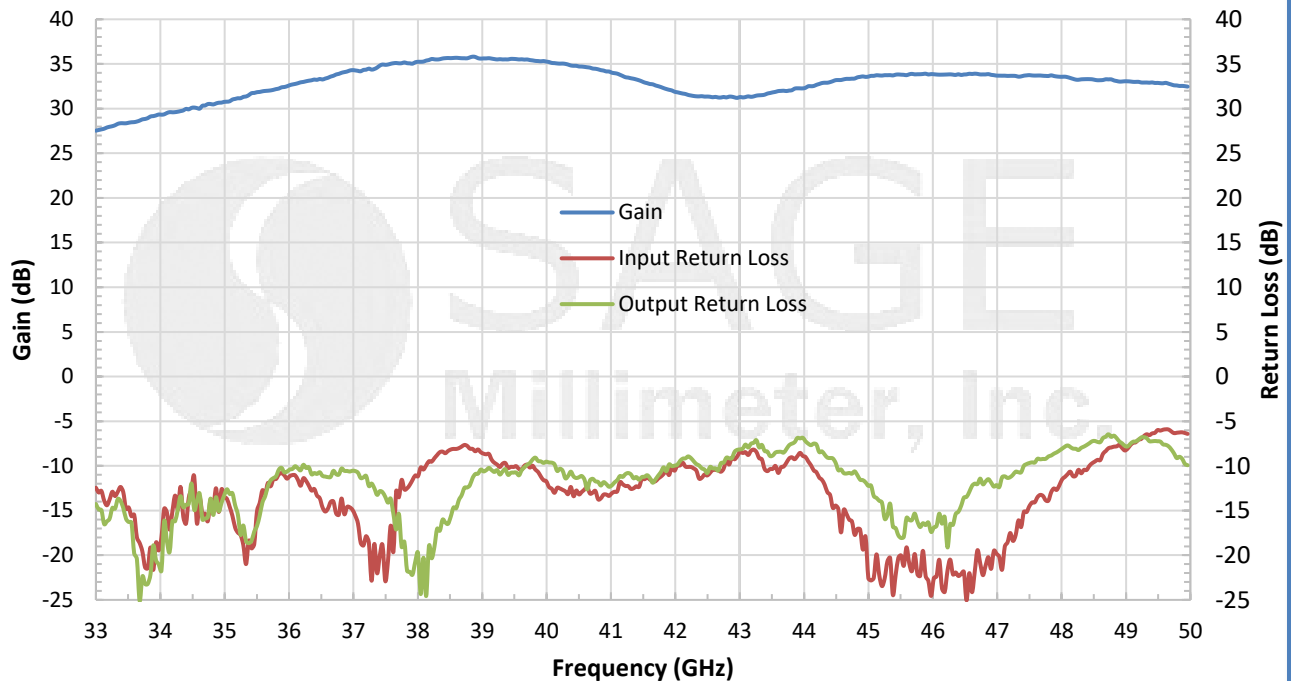




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Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/650 mA



Typical P_{1dB} vs. Frequency

Bias: +8 V_{DC}/750 mA

