SBP-4036033436-1919-EP

U-Band Power Amplifier, 40 to 60 GHz, 34 dB Gain, +36 dBm P_{sat}

SBP-4036033436-1919-EP is a power amplifier with a typical small signal gain of 34 dB and a nominal P_{sat} of +36 dBm across the frequency range of 40 to 60 GHz. The DC power requirement for the amplifier is +20 V_{DC}/3.6 A. The mechanical configurations is an inline structure with WR-19 waveguide with UG-383/U-M Anti-Cocking Flange as its input port and output port.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	40 GHz		60 GHz
Small Signal Gain		34 dB	
Power Gain		25 dB	
P_{sat}		+36 dBm	
P_{in} (Damage)			+12 dBm
Input Return Loss		7 dB	
Output Return Loss		7 dB	
DC Supply Voltage		+20 V_{DC}	+22 V_{DC}
DC Supply Current (Saturation)		3.6 A	
Supply Voltage to Fan		+12 V_{DC}/1.1 A	
Specification Temperature		+25 ˚C	
Operating Temperature	0˚C		+50 ˚C

Mechanical Specifications:

Item	Specification
Input	WR-19 Waveguide with UG-383/U-M Anti-Cocking Flange
Output	WR-19 Waveguide with UG-383/U-M Anti-Cocking Flange
Power Supply	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Size	3.15” (L) X 2.99” (W) X 3.92” (H)
Outline	BP-HU-H1

ECCN

3A001.b.4

FEATURES

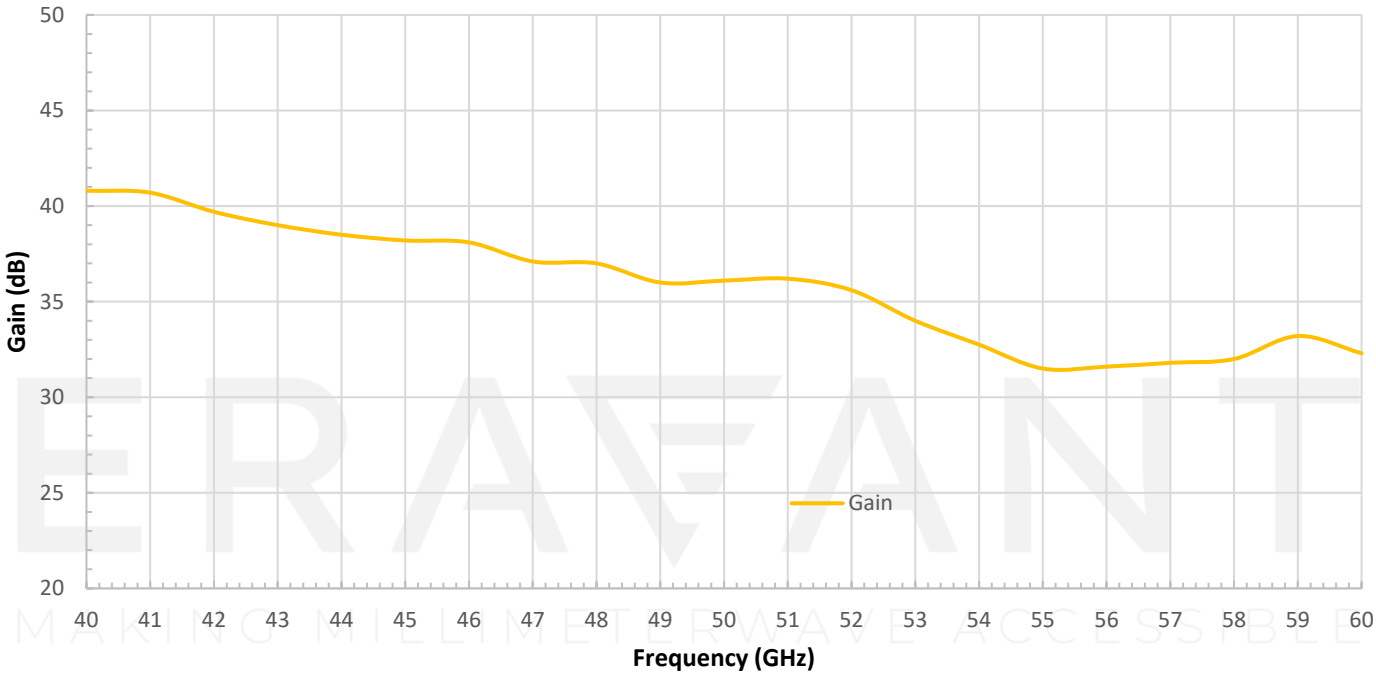
- Broadband Performance
- High Gain
- High Output Power

APPLICATIONS

- Test Equipment
- Radar Systems
- Communications

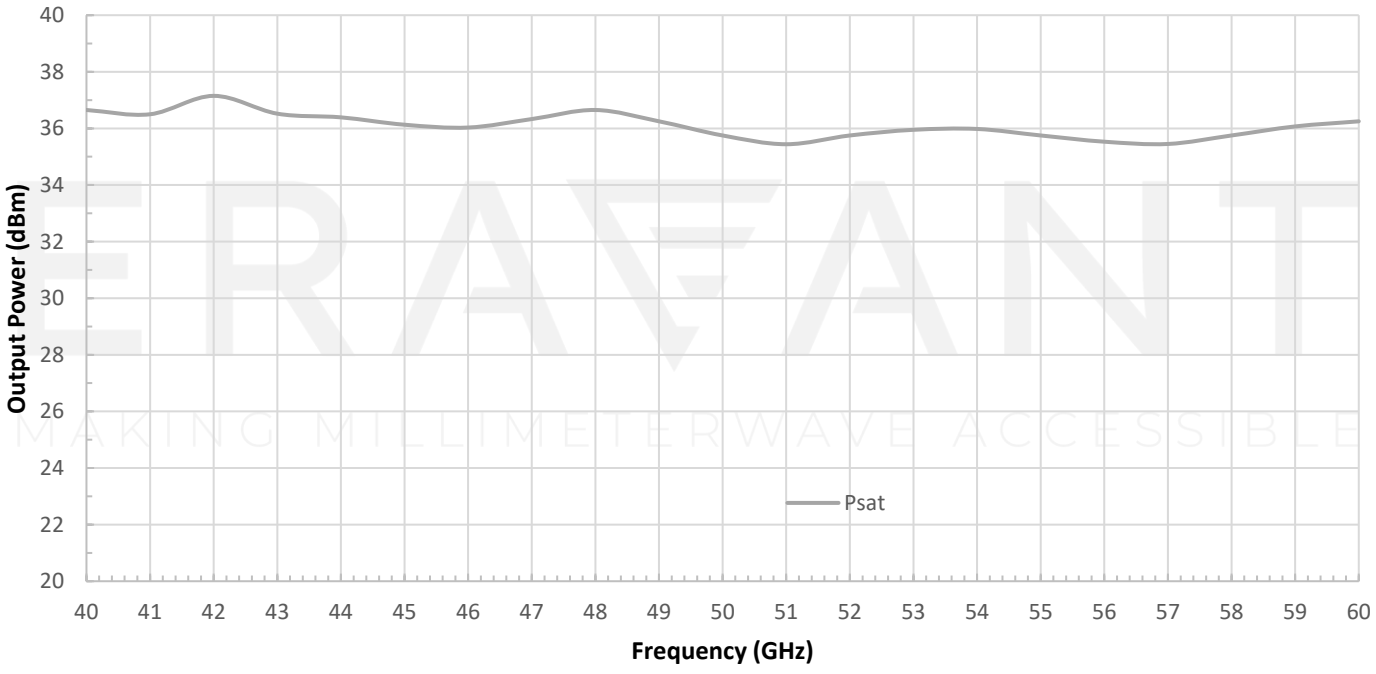
SUPPLEMENTAL DETAILS

Gain vs. Frequency

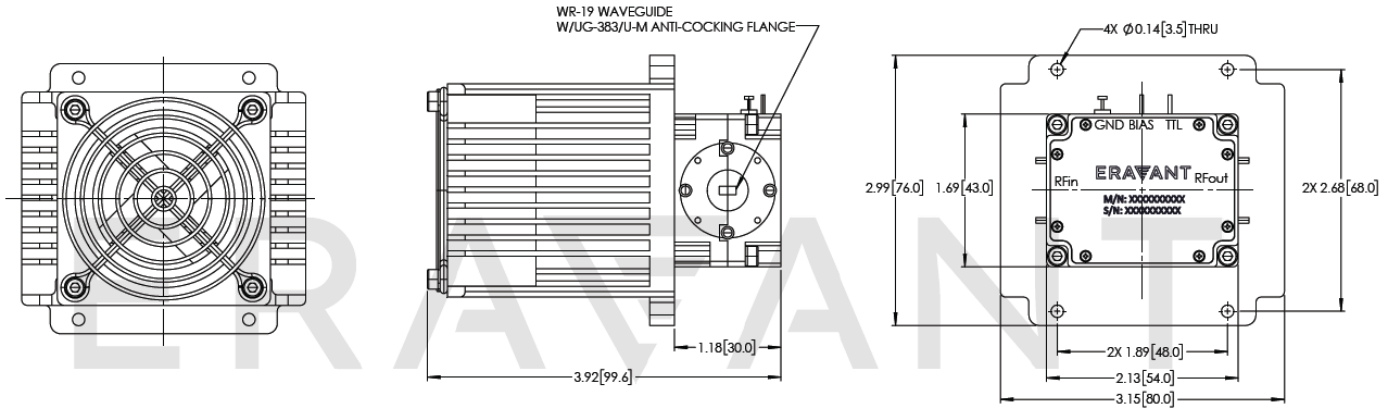


Output Power vs. Frequency

RF Sat: +20 V_{DC}/3300 mA



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



WIRE COLOR	FUNCTIONS
RED	+12V
BLACK	GND
YELLOW	TACH SIGNAL (OPTIONAL)
BLUE	PWM (OPTIONAL)

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.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- Do not block the air inlets and outlets.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Do not plug or unplug any connectors when amplifier is activated. All connectors must be connected/disconnected when amplifier is off.
- The case temperature of the device shall never exceed +50 ˚C. Use proper heatsink or fan if necessary
- Any foreign objects in the waveguide will degrade performance and/or damage the device.
- Proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.