SBP-4034433530-2F2F-H1-HR

40 to 44 GHz, Power Amplifier, 35 dB Gain, +32 dBm P_{sat}

SBP-4034433530-2F2F-H1-HR is a power amplifier with a typical small signal gain of 35 dB and a nominal P_{sat} of +32 dBm across the frequency range of 40 to 44 GHz. The DC power requirement for the amplifier is +8 V_{DC}/ 5.0 A. The mechanical configuration offers an in-line structure with 2.4 mm female connectors. Other port configurations, such as 1.85 mm connectors for either the input or output port, are also available under different model numbers. A heat sink is included for cooling.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	40 GHz		44 GHz
Small Signal Gain		35 dB	
P_{1dB}		+30 dBm	
P_{Sat}		+32 dBm	
P_{In} (Damage)			+18 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+8 V_{DC}	+12 V_{DC}
DC Supply Current (Saturated)		5.0 A	
Fan DC Voltage		+12 V_{DC}	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Input/Output Ports	2.4 mm Female Connector
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated, Black Anodize
Fan Connector	2 wire leads
Degree of Protection	IP40
Outline	BP-SC-2-SR-H95

ECCN

3A001.b.4

FEATURES

- Forced Air Cooling
- In-line Port Configuration
- High Output Power

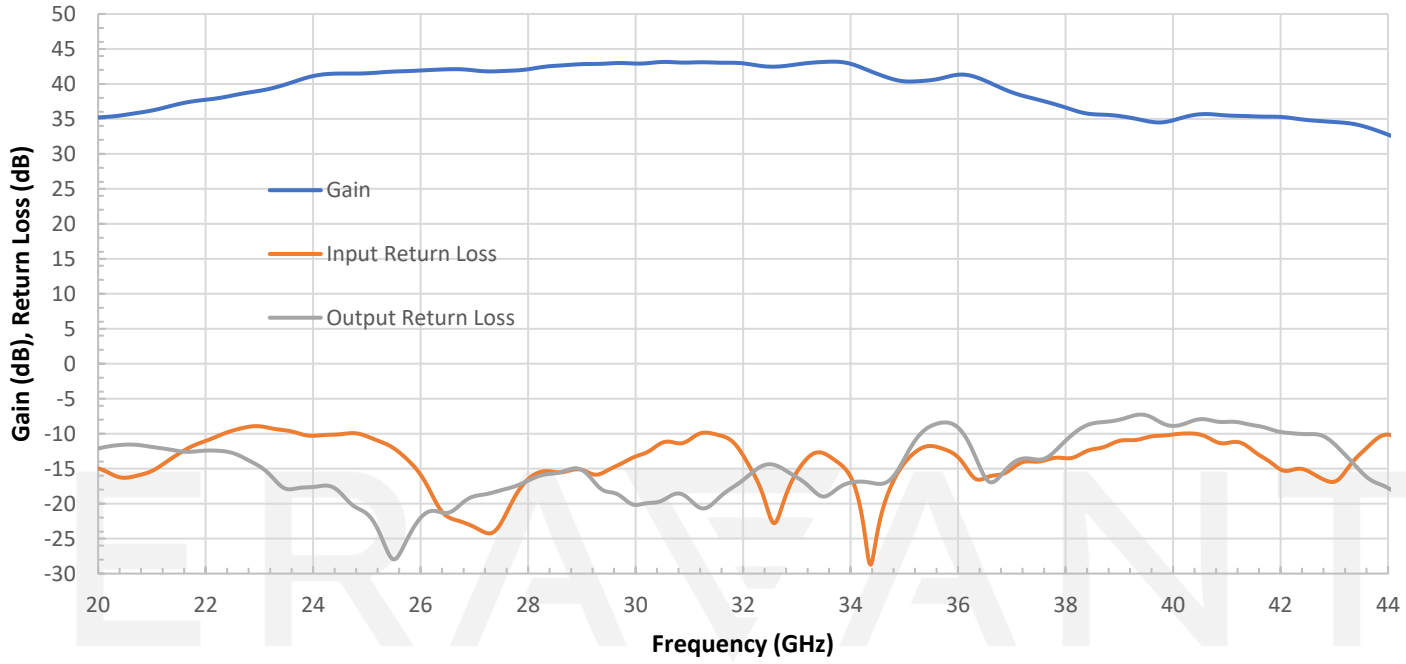
APPLICATIONS

- Communications Systems
- Test Equipment
- Radar Systems
- SATCOM

SUPPLEMENTAL DETAILS

Gain and Return Loss vs. Frequency

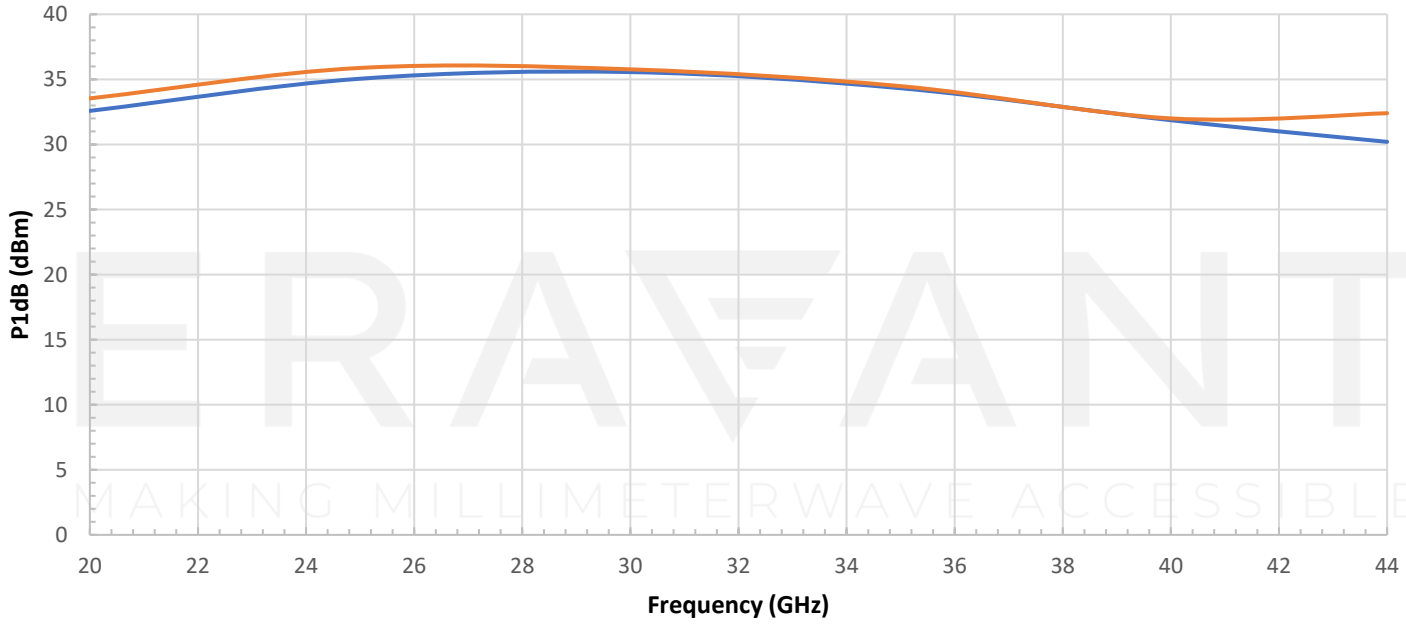
Bias: +8 V_{DC}/2.656A



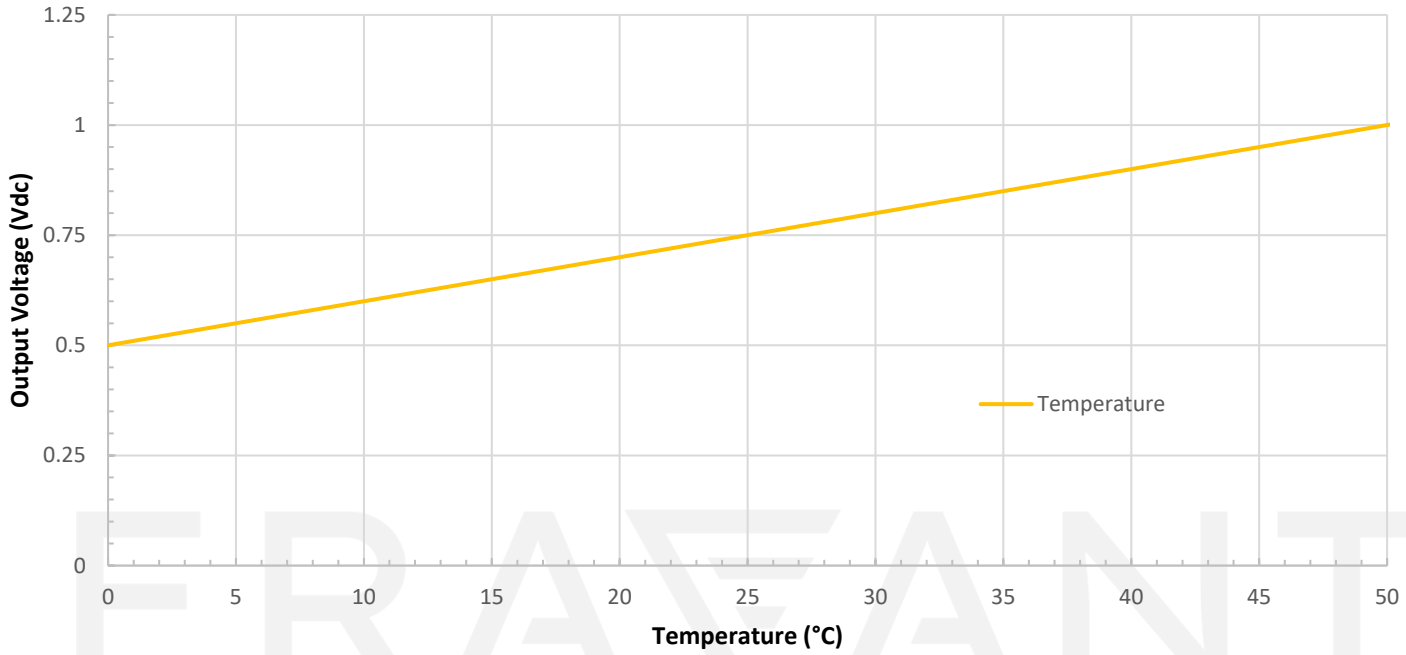
P1dB vs. Frequency

Bias: +8V_{DC}/2.6A

RFsat: +8Vdc/ 4.6A

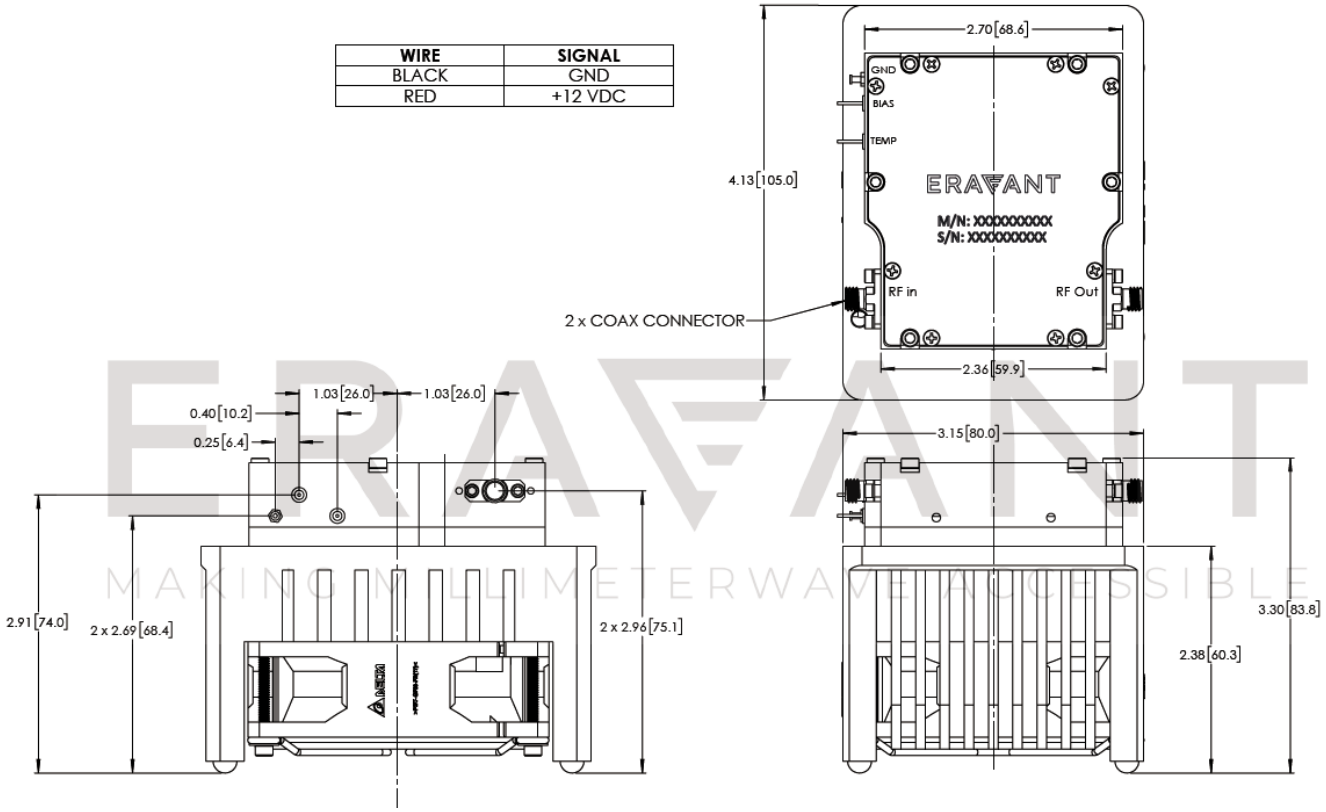


Temperature vs Temp Sensor Output Voltage



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

WIRE	SIGNAL
BLACK	GND
RED	+12 VDC



NOTE:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- Other mechanical configurations with other frequency bands 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.
- 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.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

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