SBP-2734132530-28KF-H1-HR

26.5 to 41 GHz, Power Amplifier, 25 dB Gain, +32 dBm P_{sat}

SBP-2734132530-28KF-H1-HR is a power amplifier with a typical small signal gain of 25 dB and a nominal P_{sat} of +32 dBm across the frequency range of 26.5 to 41 GHz. The DC power requirement for the amplifier is +8 V_{DC}/ 4.0 A. The mechanical configuration offers an in-line structure with WR-28 Uni-Guide™ input and K(F) connector output. Other port configurations, such as 2.4 mm connectors and 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	26.5 GHz		41 GHz
Small Signal Gain		25 dB	
P_{1dB}		+30 dBm	
P_{Sat}		+32 dBm	
P_{In} (Damage)			+25 dBm
Input Return Loss		10 dB	
Output Return Loss		10 dB	
DC Voltage		+8 V_{DC}	+12 V_{DC}
DC Supply Current (Saturated)		4.0 A	
Fan DC Voltage		+12 V_{DC}	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
Input Port	WR-28 Uni-Guide™ Waveguide with UG-599/U Compatible Flange
Output Port	2.92 mm (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated, Black Anodize
Fan Connector	2 wire leads
Degree of Protection	IP40
Outline	BP-SA-2WC-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

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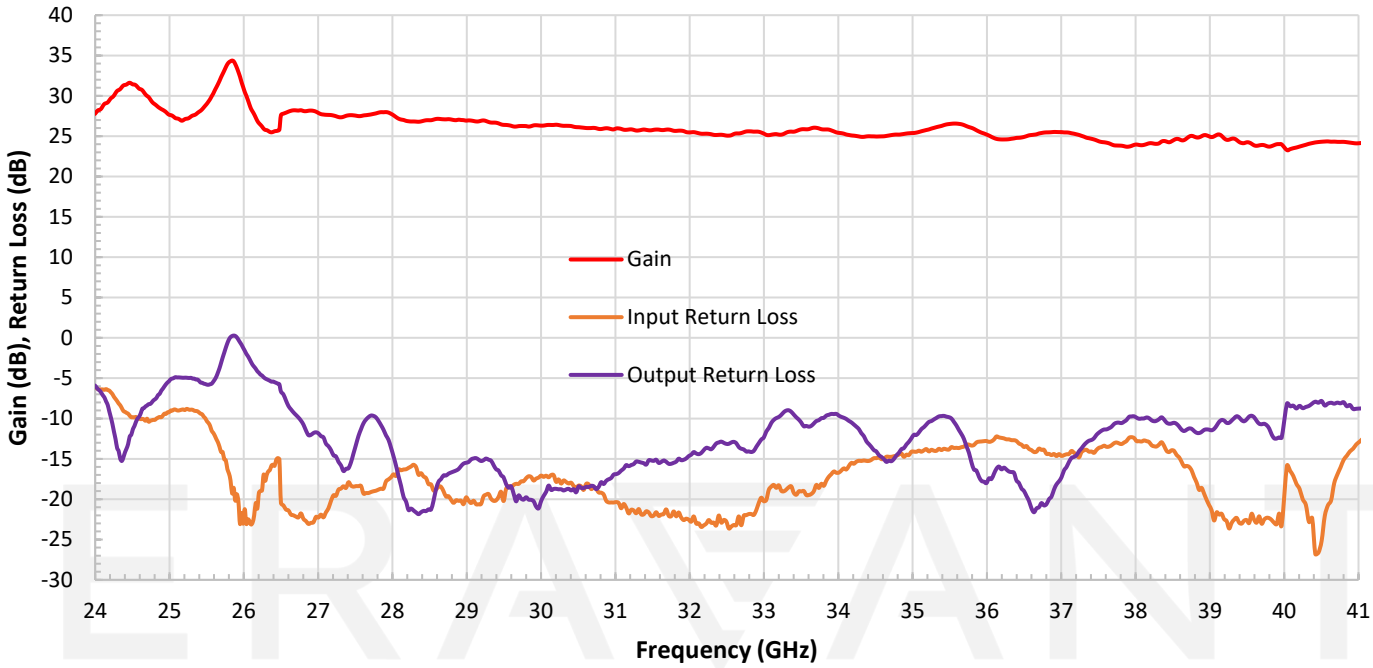
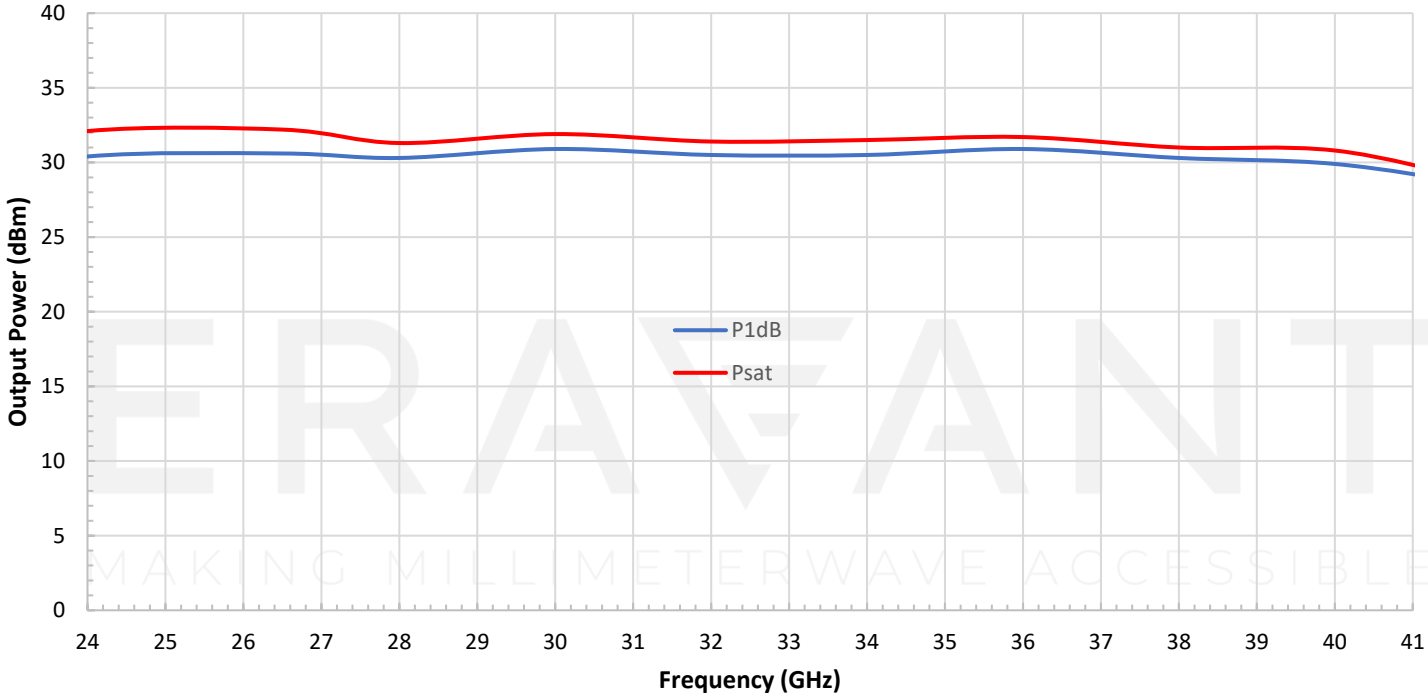
Typical Gain and Return Loss vs. Frequency

Bias: +8 V_{DC}/2.4 A



Typical Output P_{1dB} and Psat vs. Frequency

Bias: +8 V_{DC}/4 A



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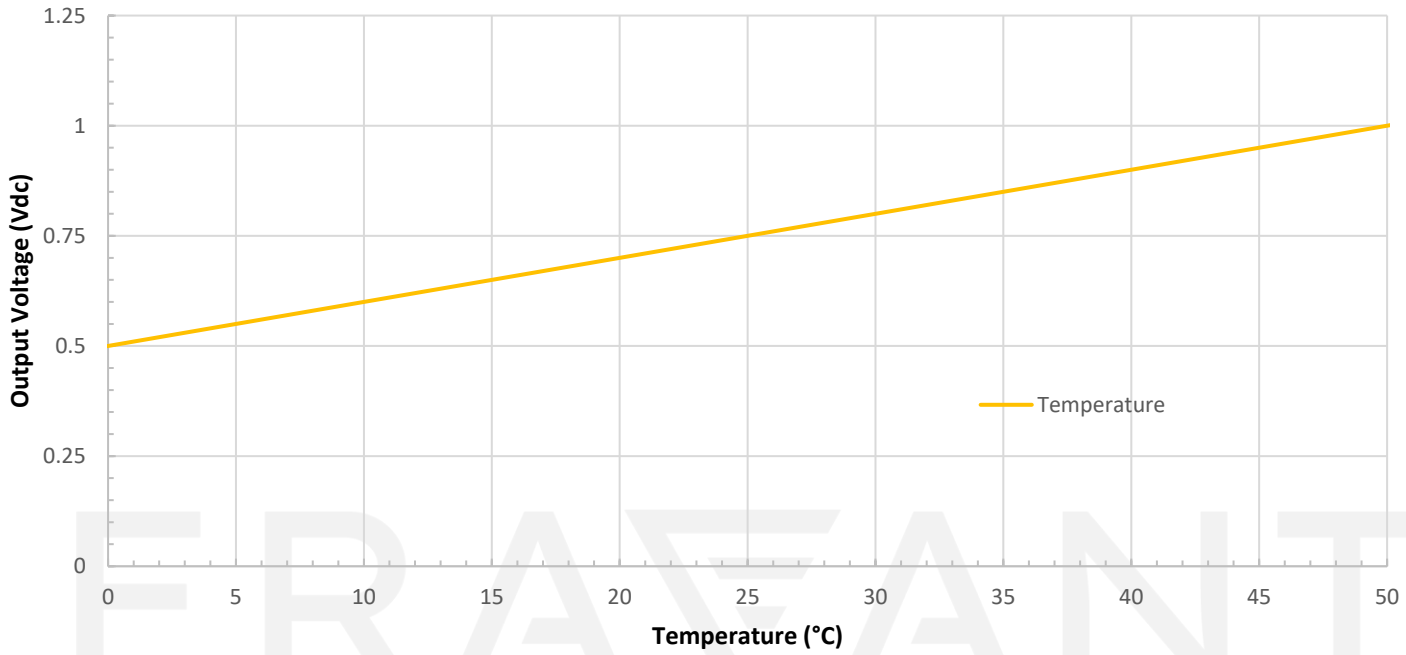
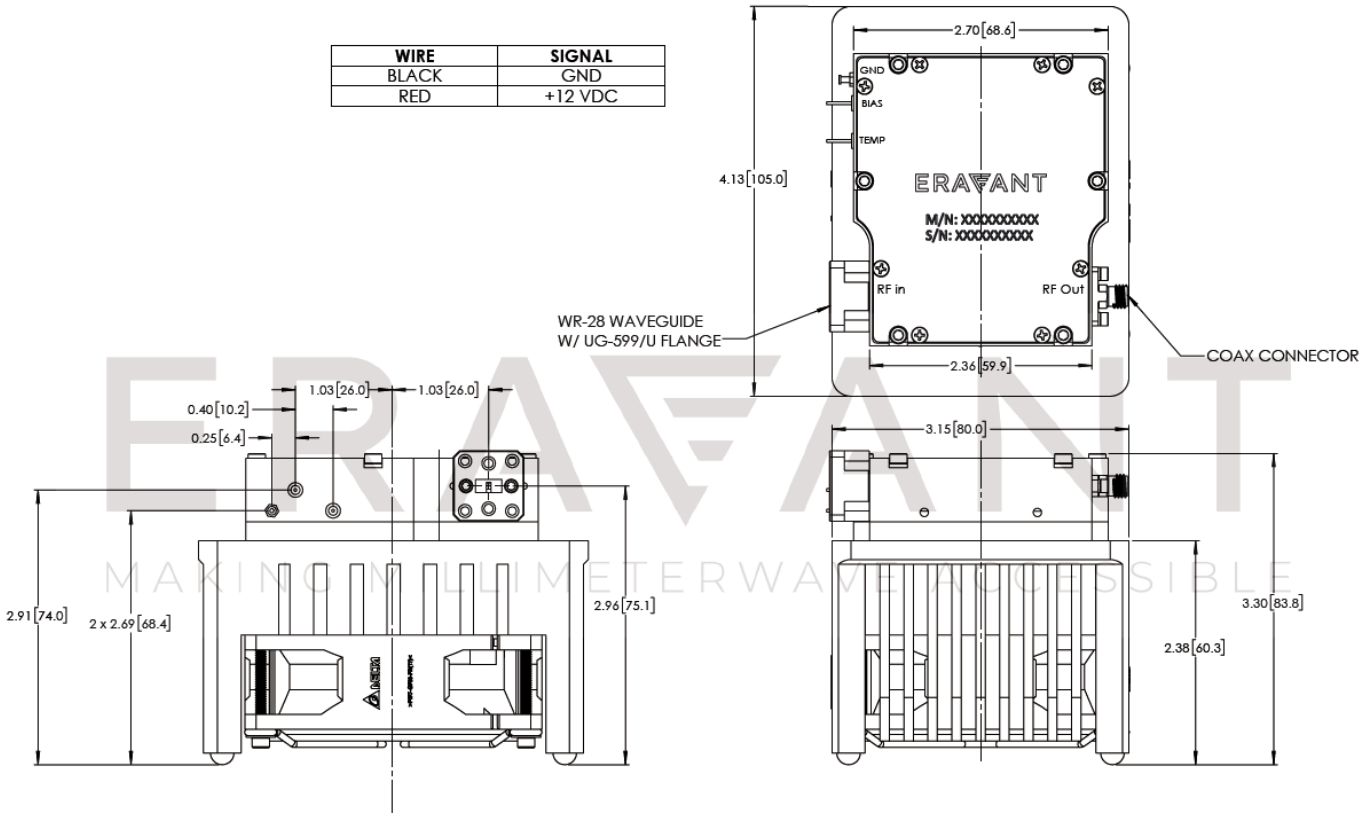
Temperature vs Temp Sensor Output Voltage



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

WIRE	SIGNAL
BLACK	GND
RED	+12 VDC



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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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