SBP-3233834038-KFKF-E1-HR

32 to 38 GHz Power Amplifier, 40 dB Gain, +38 dBm P_{sat}

SBP-3233834038-KFKF-E1-HR is designed and manufactured for radar systems. This product is a power amplifier with a typical small signal gain of 40 dB and a nominal Psat of +38 dBm across the frequency range of 32 to 38 GHz. The DC power requirement for the amplifier is +30 V_{DC}/3 A. The mechanical configuration is an inline structure with K(F) connector as its input port and output port. Other port configurations, such as K connectors and WR-28 waveguides for either the input or output, are also available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	32 GHz		38 GHz
Gain		40 dB	
P_{sat}		+38 dBm	
P_{in}			+12 dBm
Input Return Loss		15 dB	
Output Return Loss		10 dB	
DC Voltage		+30 V_{DC}	+48 V_{DC}
DC Supply Current		3 A	
Supply Voltage to Fan		+12 V_{DC}	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification
RF Ports	2.92 mm (F)
Pulsed Input (TTL)	SMA (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	1.07 lb
Size	3.15” (W) x 6.35” (L) x 3.70” (H)
Outline	BP-SC-2-BR-H190-2

ECCN

3A001.b.4

FEATURES

- Pulsed Capability
- High Output Power
- Good Output Power Flatness

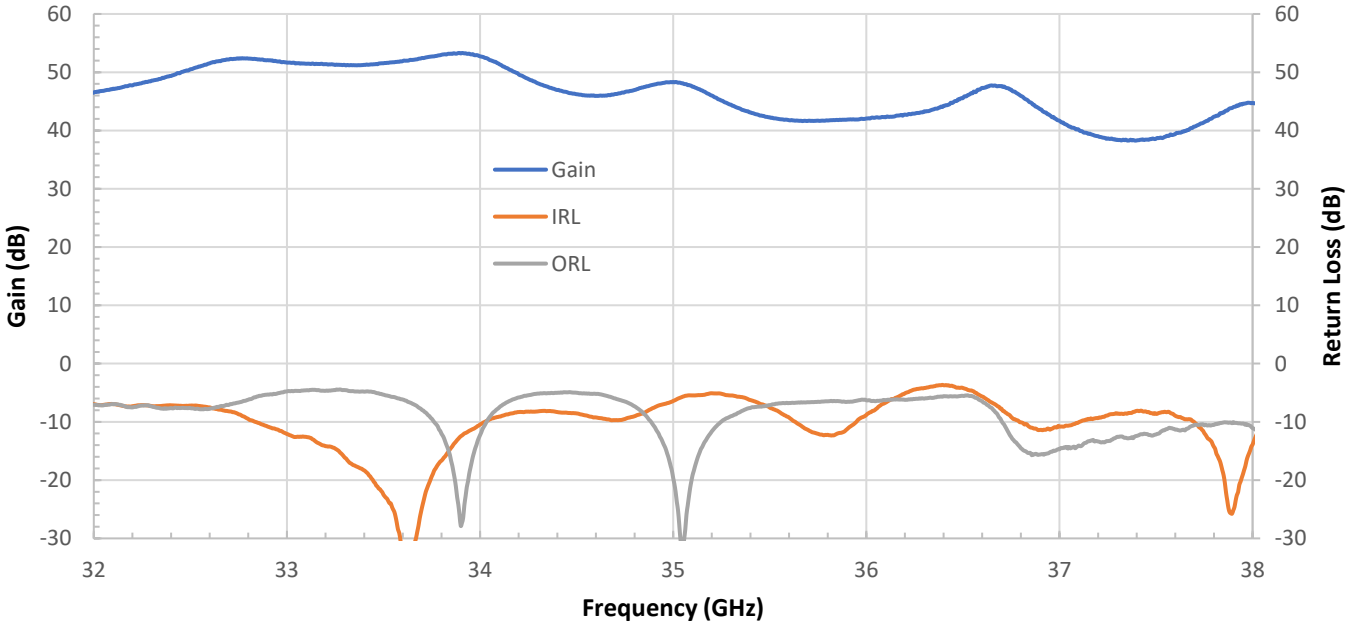
APPLICATIONS

- 5G Systems
- Radar Systems

SUPPLEMENTAL DETAILS

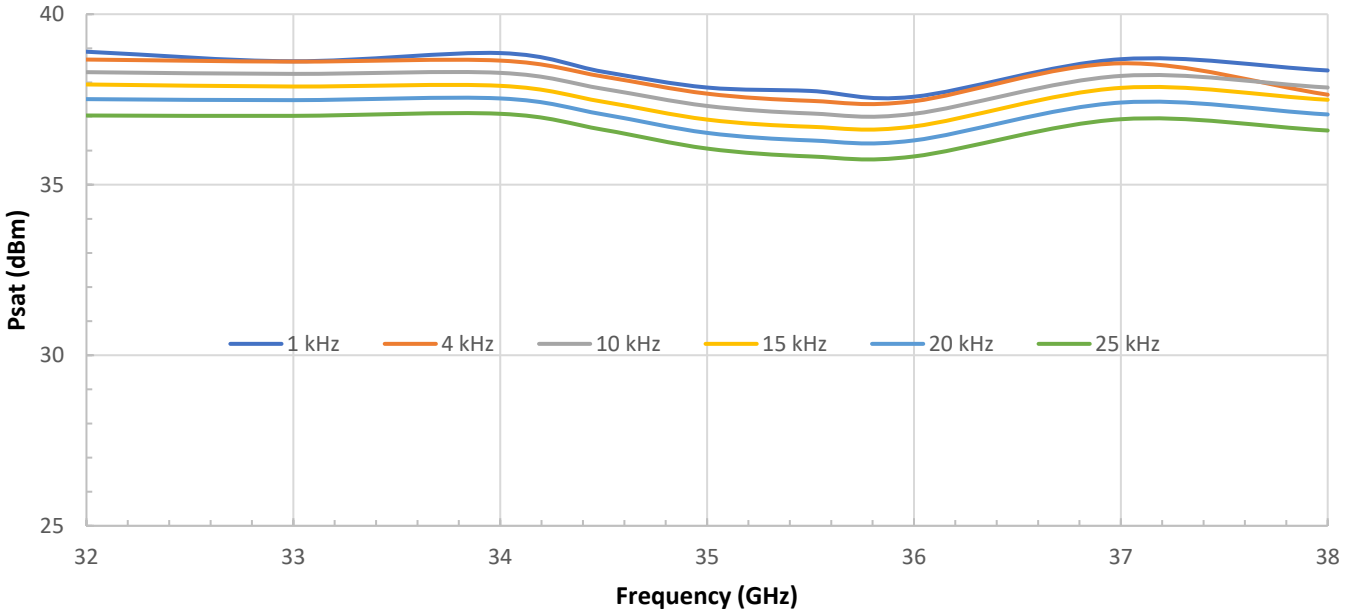
Typical Gain and Return Loss vs. Frequency

Bias: +30 V_{DC}/940 mA

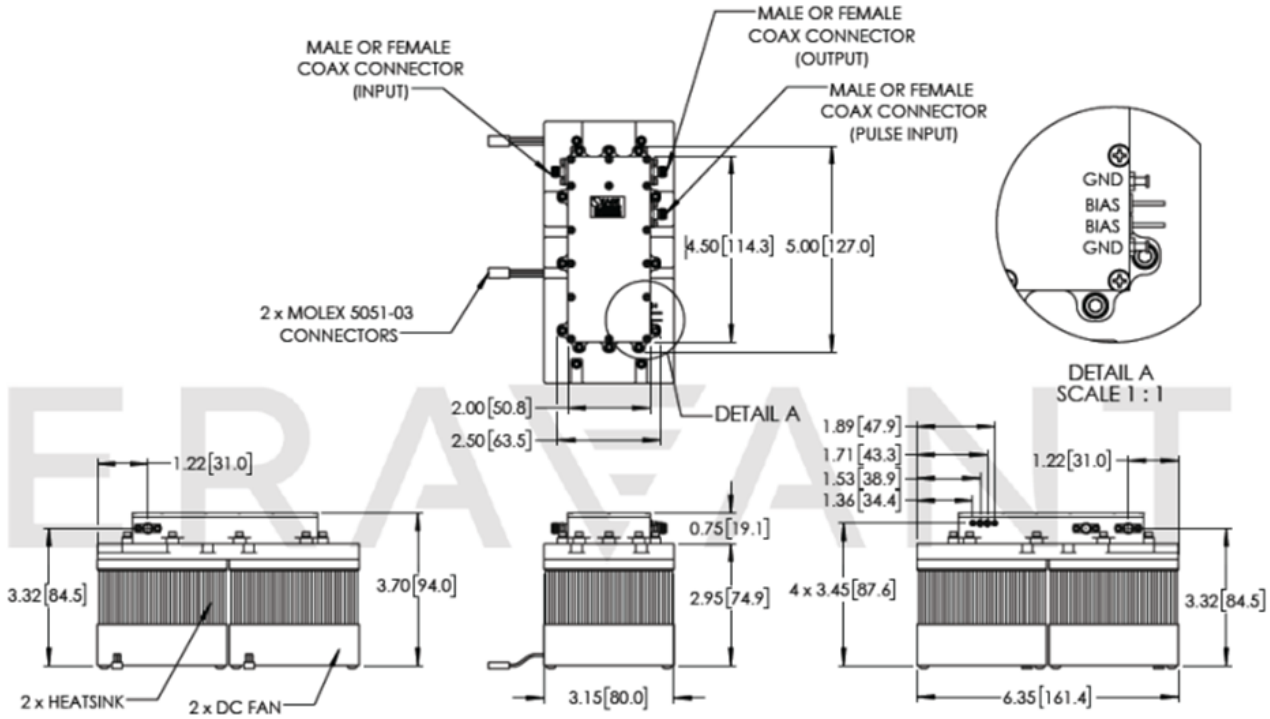


Typical P_{sat} vs. Frequency

Bias: +30 V_{DC}/ 400mA; 20% Duty Cycle



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



MOLEX - 5051-03	
WIRE	**SIGNAL**
BLACK	GND
RED	+12 VDC
YELLOW	TACH

NOTE:

- All data presented is collected from a sample lot. Actual data may vary slightly from unit to unit.
- All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.
- 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 +50 ˚C. Use proper heatsink or fan if necessary.
- Proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**