

34 to 37 GHz Power Amplifier, 44 dB Gain, +40 dBm P_{sat}

SBP-3433734440-KFKF-EP is a power amplifier with a typical small gain of 44 dB and a nominal P_{sat} of +40 dBm across the frequency range of 34 to 37 GHz. The DC power requirement for the amplifier is +28 V_{DC}/3.5 A. The mechanical configurations is an inline structure with K(F) connector as its input port and output port. Other port configurations, such as K(M) connectors and WR-28 waveguides for either the input or output port, are also available under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	34 GHz		37 GHz
Small Signal Gain		44 dB	
Power Gain		38 dB	
P _{sat}		+40 dBm	
P _{in}			+5 dBm
Input Return Loss		10 dB	
Output Return Loss		6 dB	
DC Supply Voltage	+26 V _{DC}	+28 V _{DC}	+32 V _{DC}
DC Supply Current		3.5 A	
Supply Voltage to Fan		+12 V _{DC} /0.6 A	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
Input	2.92 mm (K) Female
Output	2.92 mm (K) Female
Power Supply	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Size	2.99" (L) X 3.15" (W) X 3.30" (H)
Outline	BP-HC-H2

ECCN

3A001.b.4

FEATURES

- Broadband Performance
- High Gain
- High Output Power

APPLICATIONS

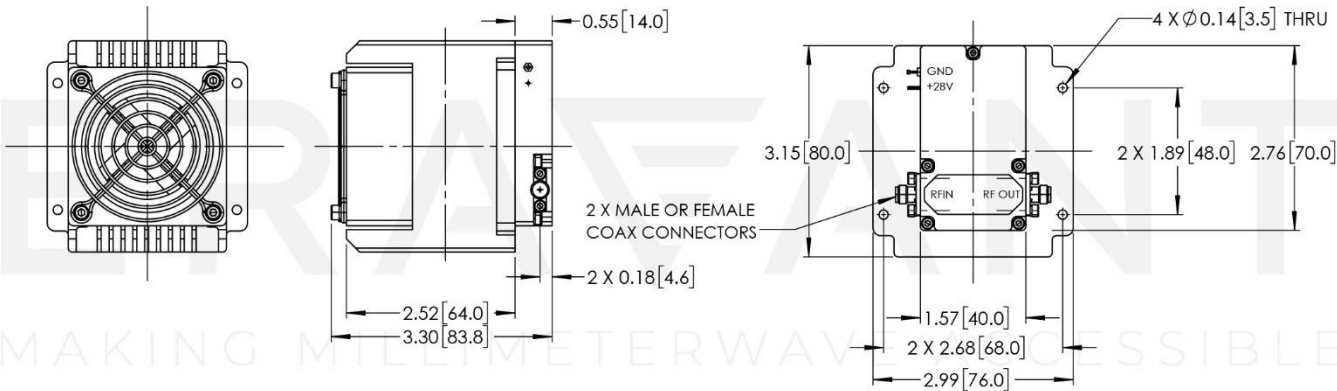
- Radar Systems
- Communication Systems
- Test Equipment

SUPPLEMENTAL DETAILS



SBP-3433734440-KFKF-EP

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



WIRE COLOR	FUNCTIONS
RED	+12 VDC
BLACK	GND
YELLOW	TACH (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.