# SBP-2733134640-KFKF-EP

## 27 to 31 GHz Power Amplifier, 46 dB Gain, +40 dBm $P_{sat}$

**SBP-2733134640-KFKF-EP** is a power amplifier with a typical small gain of 46 dB and a nominal $P_{sat}$ of +40 dBm across the frequency range of 27 to 31 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 | 27 GHz | | 31 GHz |
| Small Signal Gain | | 46 dB | |
| Power Gain | | 38 dB | |
| $P_{sat}$ | | +40 dBm | |
| $P_{in}$ | | | +5 dBm |
| Input Return Loss | | 10 dB | |
| Output Return Loss | | 5 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

EAR99

### FEATURES

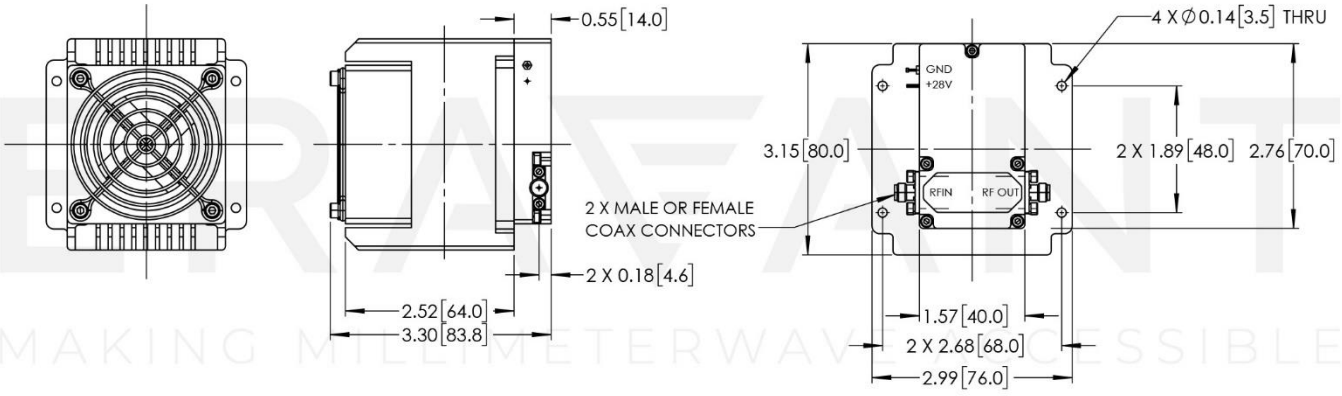
- Broadband Performance
- High Gain
- High Output Power

### APPLICATIONS

- Radar Systems
- Communication Systems
- Test Equipment

### SUPPLEMENTAL DETAILS

**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.