

## SBP-2733134036-KFKF-EA

### Ka-Band Power Amplifier, 27 to 31 GHz, 40 dB Gain, +38 dBm P<sub>sat</sub>

**SBP-2733134036-KFKF-EA** is a power amplifier with a typical power gain of 40 dB and a nominal P<sub>sat</sub> of +38 dBm across the frequency range of 27 to 31 GHz. The DC power requirement for the amplifier is +24V V<sub>DC</sub>/1.5 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
Power Gain	40 dB		50 dB
Gain Flatness		±2 dB	
P <sub>1dB</sub>		+36 dBm	
P <sub>sat</sub>		+38 dBm	
P <sub>in</sub>			+15 dBm
Input Return Loss		9 dB	
DC Supply Voltage	+20 V <sub>DC</sub>	+24 V <sub>DC</sub>	+28 V <sub>DC</sub>
DC Supply Current		1.5 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	2.21" (L) X 1.97" (W) X 0.51" (H)
Outline	BP-LC-1

#### ECCN

EAR99

#### FEATURES

- High Gain
- Good Gain Flatness
- High Output Power

#### APPLICATIONS

- 5G Systems
- Radar Systems
- Communication Systems
- Test Equipment

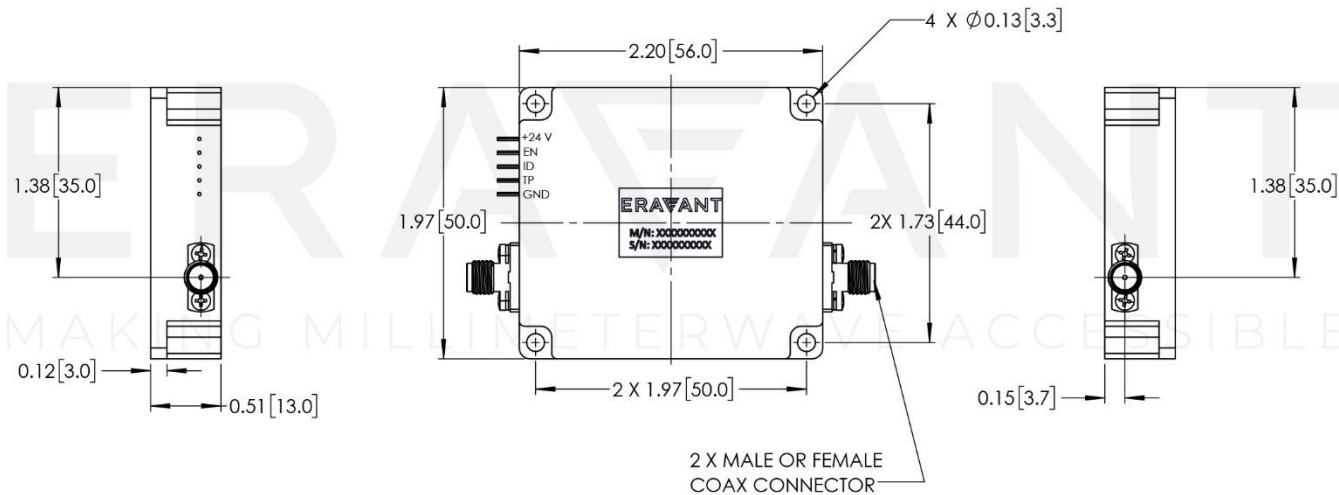
#### SUPPLEMENTAL DETAILS



### Pin Definitions:

Pin	Name	Description
1	+24 V	DC Power Supply, +24 V
2	EN	Amplifier Enable: TTL "High" (Logic 1) Amplifier Disable: TTL "Low" (Logic 0)
3	ID	Current Detection, $I = (V-2.5)/0.1$ , Unit: A
4	TP	Temperature Detection: $T = (V-0.5)/0.01$ , Unit: °C
5	GND	DC Power Ground

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



### 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.
- 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. Eravant M/N SUA-95-S2-4 is recommended heatsink for this amplifier.
- 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.