# SBL-2034234035-KFKF-S1

## Low Noise Amplifier, 20 to 42 GHz, 40 dB Gain, 3.5 dB NF

#### **Description:**

Model SBL-2034234035-KFKF-S1 is a low noise amplifier with a typical small signal gain of 40 dB and a nominal noise figure of 3.5 dB across the frequency range of 20 to 42 GHz. The DC power requirement for the amplifier is +8 V<sub>DC</sub>/800 mA. The RF connectors are female K connectors. Other port configurations are also available under different model numbers.

#### Features:

- Full Waveguide Band Operation
- State-of-the-Art Noise Figure
- **Good Gain Flatness**
- High Output P<sub>1dB</sub>

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	20 GHz		42 GHz
Gain		40 dB	
Noise Figure		3.5 dB	
P <sub>1dB</sub>		+22 dBm	
P <sub>in</sub>			+5 dBm
Input Return Loss		9 dB	
Output Return Loss		9 dB	
DC Voltage		+8 V <sub>DC</sub>	
DC Supply Current		800 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

### **Mechanical Specifications:**

Item	Specification	
Input Port	2.92 mm (K) Female	
Output Port	2.92 mm (K) Female	
Bias	Solder Pin	
Case Material	Aluminum	
Finish	Gold Plated	
Outline	BG-SC-1	



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# **Applications:**

- 5G Systems
- **Radar Systems**
- **Communication Systems**
- Low Noise Receivers

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



#### Note:

- 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.
- Exceeding the maximum bias voltage of <u>+15 V<sub>DC</sub></u> will cause amplifier overheating and result the instability.
- 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.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.



