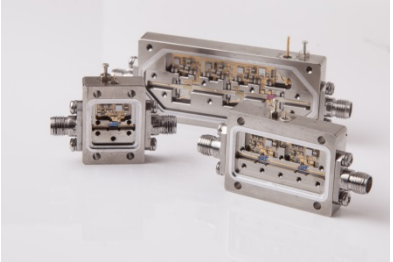
# Model # BX7969

**Available as:**
**BX7969 SMA Connectorized Housing H2L**

# RF/Microwave Amplifier



## Features

- High Output Power: +21.5 dBm
- High Gain: 17 dB
- Hermetic Laser Welded Housing
- Environmental Screening Available

## Technical Specifications

| Characteristic | | TYPICAL Ta = +25 °C | MIN/MAX Ta = -55°C to +85 °C |
|---|---|---|---|
| Frequency | | 50 to 4000 MHz | 100 – 4000 MHz |
| Gain (dB) | | 17 | 14.5 Min. |
| Power @ 1 dB Comp. (dBm) | | +21.5 | +20 Min. |
| Reverse Isolation (dB) | | -34 | --- |
| VSWR | In | 1.5:1 | 2.0:1 Max. |
| | Out | 1.5:1 | 2.0:1 Max. |
| Noise Figure (dB)* (200 MHz -4000 MHz) | | 5.2 | 6.5 Max. |
| Power | Vdc | +15 | +15 |
| | mA | 230 | 250 Max. |

1) Typical values are measured at 25°C, but not guaranteed.

2) Care should always be taken to effectively ground the case of each unit.

3) Package outlines drawings below for reference only.

## Mechanical & Electrical

| Parameter | Specification |
|---|---|
| Specification Temperatures (Min/Max) | -55°C to +85°C |
| Housing Size | 1.36" L x 0.66" W x 0.33" H |
| Housing Drawing | H2L Package |
| RF Connectors | SMA Female Replaceable Connectors |

## Typical Intermodulation Performance at 25 °C

| | |
|---|---|
| Second Order Harmonic Intercept Point: | +62 dBm (Typ.) |
| Second Order Two Tone Intercept Point: | +56 dBm (Typ.) |
| Third Order Two Tone Intercept Point: | +36 dBm (Typ.) |

**Note:** Measured midband
*NF (200-4000 MHz)

## Absolute Maximum (No Damage) Ratings

| | |
|---|---|
| Operating Temperature | -55°C to +100 °C |
| Storage Temperature | -62°C to +125°C |
| Case Temperature | +125 °C |
| DC Voltage | +17 Volts |
| Continuous RF Input Power | +15 dBm |
| Short Term RF Input Power | 200 Milliwatts (1 Minute Max.) |
| Maximum Peak Power | 0.5 Watt (3 µsec Max.) |

## Instructions

| | |
|---|---|
| Grounding Instructions | Care should be taken to effectively ground each unit. |
| Revisions | API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice. |
| Min./Max. Values | Specifications are guaranteed when tested in a 50 Ω (ohm) system. |
| Typical performance graphs and values are measured at 25°C, but not guaranteed. | |

NOTES:

1. HOUSING: 70/30 CN/NI
   ELECTRONIC GRADE