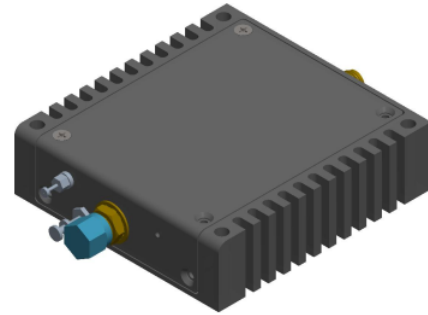




.100-200 MHz High Performance Balanced Amplifier

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The Spectrolite product line leverages Silver Palm Technologies' field-proven proprietary designs into compact modules for military, commercial, and laboratory use. The high-dynamic range balanced amplifiers used in the Spectrolite products were conceived out of the need for RF performance not previously achievable with off-the-shelf components. The SPEC-A11AG offers excellent performance within the LF to VHF bands. With high second-and third-order intercept points, the SPEC-A11AG is an HF amplifier that offers great performance without sacrificing noise figure or power consumption.



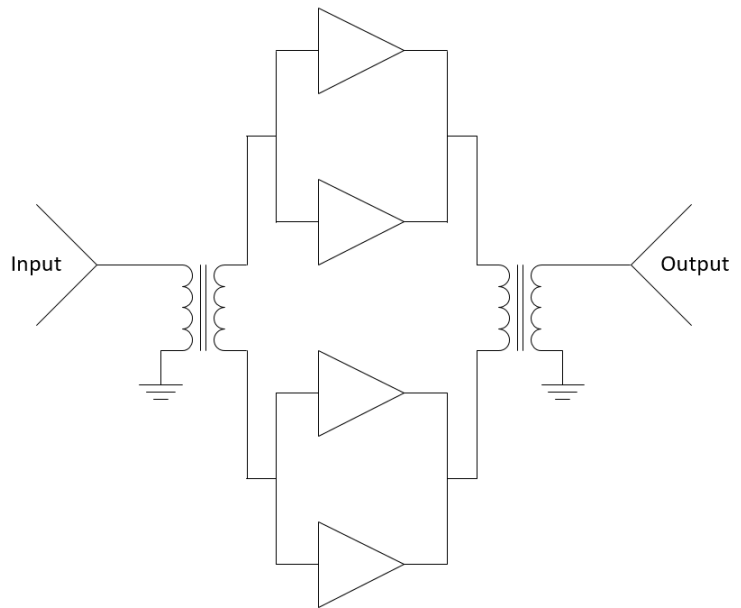
SPEC-A11AG

### Features

- High IP3
- Excellent Second-Order Performance
- Low Noise
- Low Power

### Applications

- CATV
- DOCSIS 3.1
- Cellular



SPEC-A11AG Electrical Schematic

## Electrical Specifications

All measurements are made at +25 °C unless otherwise noted.

**Table 1: Specifications**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Frequency	<i>Freq.</i>	.100	–	200	MHz
Gain	<i>S<sub>21</sub></i>	–	14.5	–	dB
Noise Figure	<i>NF</i>	–	3.86	–	dB
Output Third-Order Intercept	<i>OIP<sub>3</sub></i>	–	+41	–	dBm
Output Second-Order Intercept	<i>OIP<sub>2</sub></i>	–	+79	–	dBm
Output Power at 1dB Compression	<i>P1dB</i>	–	25.2	–	dBm
Input VSWR	<i>VSWR1</i>	–	1.34 : 1	–	–
Output VSWR	<i>VSWR2</i>	–	1.40 : 1	–	–
Dimensions	–	–	2.5" x 2.6" x .71"	–	in
Weight	–	–	.25	–	lbs
Power	–	–	2.18	–	Watts
Current at +5.5V	–	–	.396	–	Amps
Supply Voltage	–	+5.5	–	+16	Volts

## Absolute Maximum Ratings Without Damage

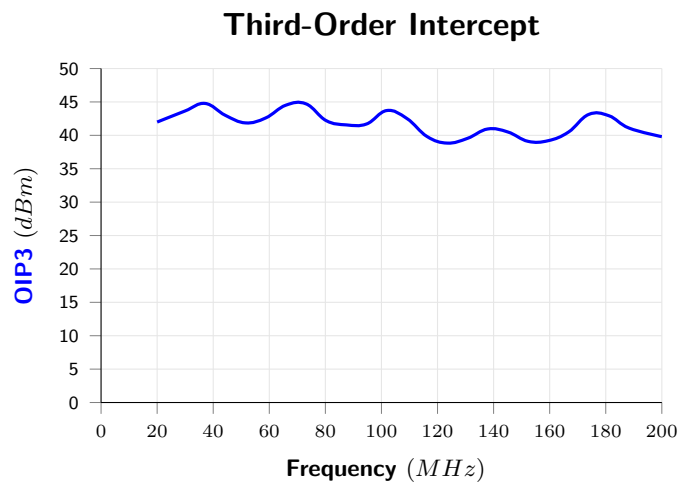
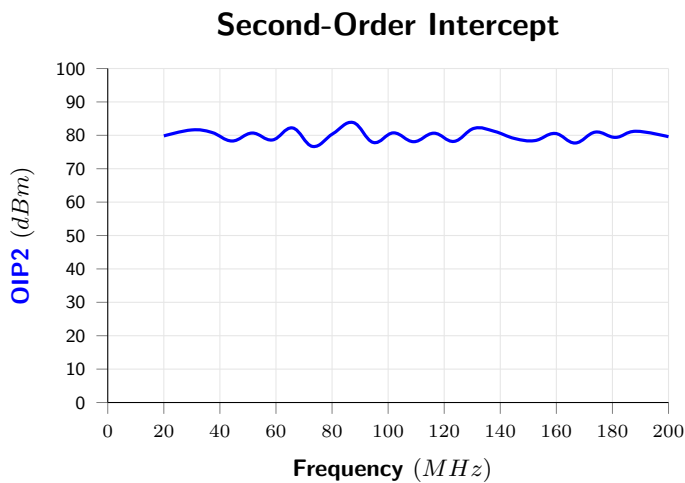
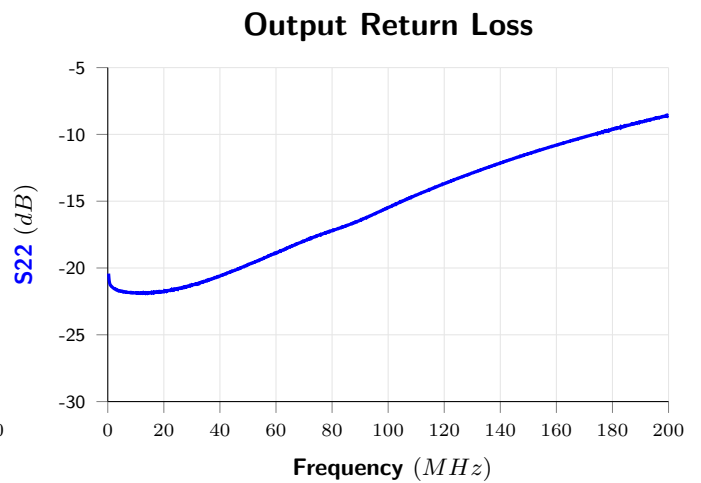
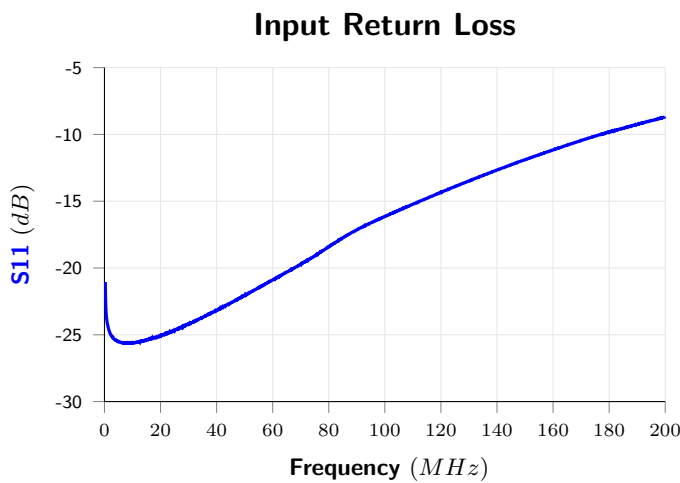
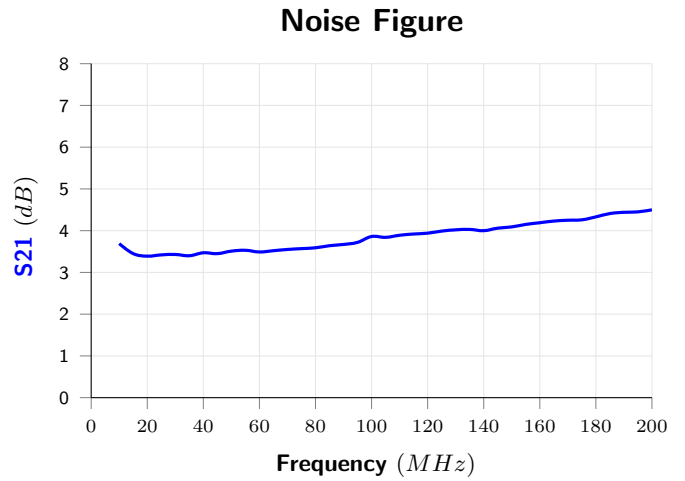
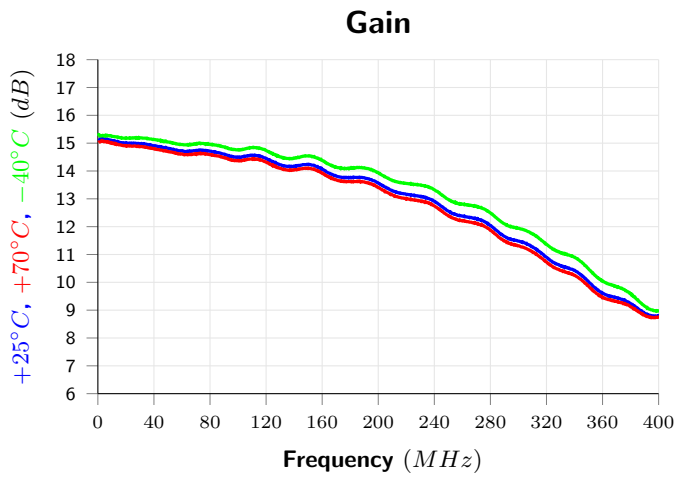
Stresses above those listed under Absolute Maximum Ratings will cause permanent damage to the module.

**Table 2: Absolute Maximum Ratings**

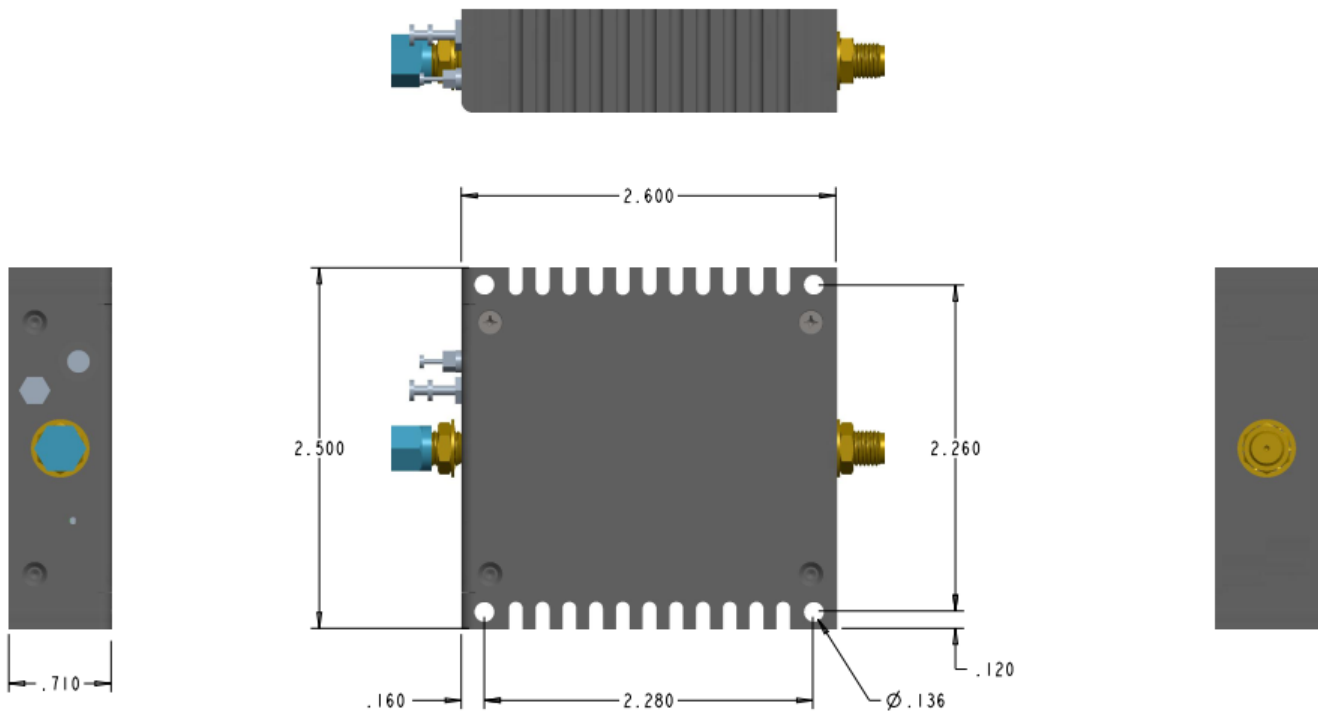
Parameter	Rating
Storage Temperature	-65 to +150 °C
Operational Temperature	-40 to +70 °C
Supply Voltage	+20V
Maximum Continuous RF Input Power	+21dBm

## Typical Performance Data

All measurements are made at +25 °C unless otherwise noted.



## Product Dimensions



## Ordering Options

We offer RoHS compliant and RoHS non-compliant options.

Spectrolite Product Number	RoHS
SPEC-A11AG	RoHS Non-Compliant
SPEC-A11AG#PBF	RoHS Compliant