

**500-6500 MHz Extended Frequency Range Balanced Amplifier**

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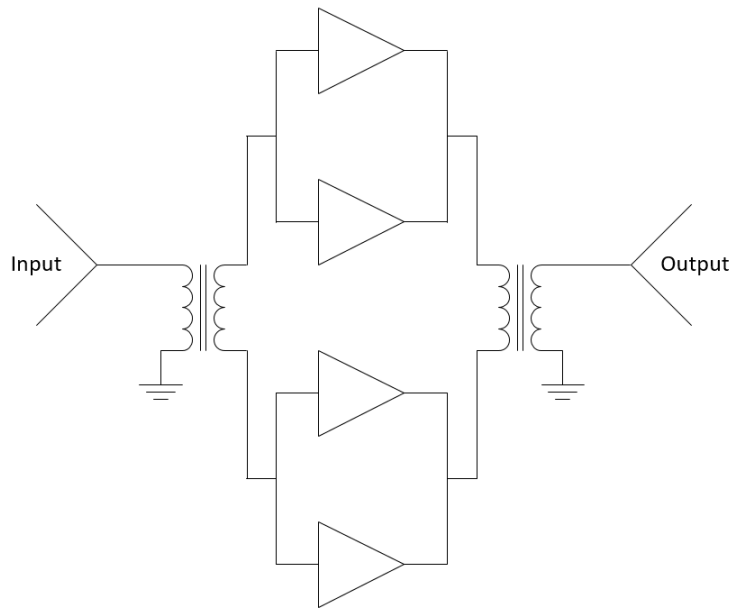
The Spectrolite product line leverages Silver Palm Technologies' field-proven proprietary designs into compact modules for military, commercial, and laboratory use. The high-dynamic range balanced amplifiers used in the Spectrolite products were conceived out of the need for RF performance not previously achievable with off-the-shelf components. The SPEC-A11HT offers this excellent performance inside the UHF and SHF bands. With excellent second and third-order intercept points, the SPEC-A11HT provides high dynamic range amplification without sacrificing noise figure or power consumption.

**SPEC-A11HT****Features**

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

**Applications**

- Portable Wireless
- Base Station Infrastructure
- MMDS and Wireless LAN

**SPEC-A11HT Electrical Schematic**

## Electrical Specifications

All measurements are made at  $+25^{\circ}\text{C}$  unless otherwise noted.

**Table 1: Specifications**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Frequency	$Freq.$	500	–	6500	MHz
Gain	$S_{21}$	–	14.0	–	dB
Noise Figure	$NF$	–	3.5	–	dB
Output Third-Order Intercept	$OIP_3$	–	+39	–	dBm
Output Second-Order Intercept	$OIP_2$	–	+65	–	dBm
Output Power at 1dB Compression	$P1dB$	–	26.0	–	dBm
Input VSWR	$VSWR1$	–	1.3 : 1	–	–
Output VSWR	$VSWR2$	–	1.4 : 1	–	–
Dimensions	–	–	2.5" x 2.6" x .71"	–	in
Weight	–	–	.25	–	lbs
Power	–	–	1.38	–	Watts
Current at +5.5V	–	–	.252	–	Amps
Supply Voltage	–	+5.5	–	+16	Volts

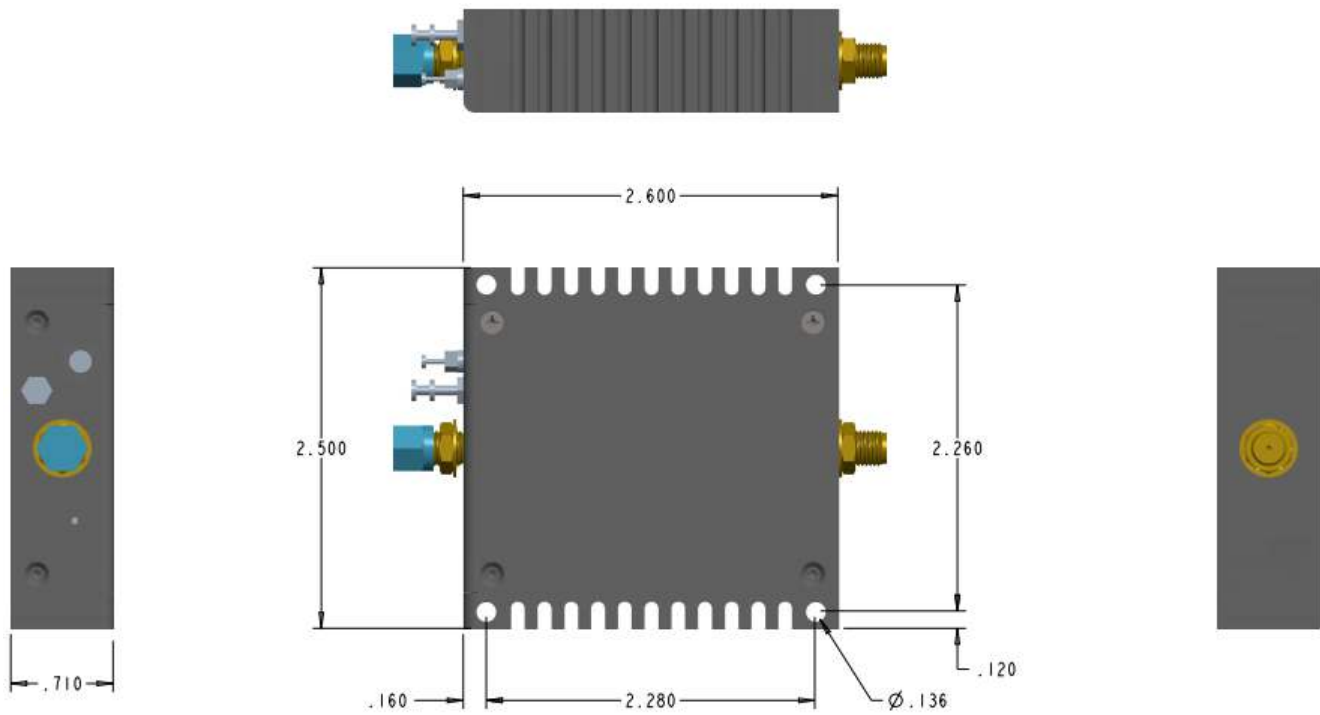
## Absolute Maximum Ratings without Damage

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	+26dBm

## Product Dimensions



Chassis

## Ordering Options

We offer RoHS compliant and RoHS Non-compliant options.

Spectrolite Product Number	RoHS
SPEC-A11HT	RoHS Non-Compliant
SPEC-A11HT#PBF	RoHS Compliant