

Features

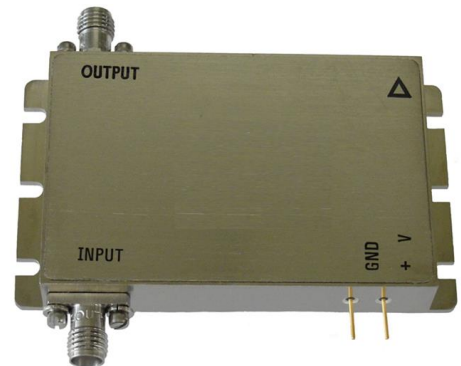
- 1.1 GHz to 10.6 GHz Frequency Range
- Typical P1dB power +30 dBm (1W), 28 dBm min
- Gain Flatness ± 1.2 dB Typical
- P1dB +10 dBm typical
- Internally Regulated
- Operates from Single +12V Supply
- Unconditionally Stable
- LVTTTL Enable On/Off
- State-of-the-Art GaAs Technology

Applications

- Radar
- Test Equipment
- EW Systems
- Lab Applications

General Description

LA10405 is a Broadband power amplifier in a compact size. The amplifier I/Os are Internally matched to 50 Ohms and are DC blocked. The amplifier is ideal for use as extending power range of test equipment, EW systems or where broadband amplification and power are required in a Hi-Rel communications system for Commercial or Military applications.



Electrical Specifications

Parameter	Symbol	Specification	Conditions
Frequency Range		1.1 to 10.6 GHz	
Small Signal Gain		30dB minimum	
Gain Flatness		±2.5dB maximum	
Gain Flatness 1GHz BW		±1.4dB maximum	
Noise Figure		6dB maximum	
Output Power (P1dB)		+30dBm typical	
OIP3		37dBm typical	@ 9GHz Two tone F1-F2 = 10MHz
ON / OFF		2V min, 5V max	LVTTL High ON (10ms)
RF Input Impedance ²		1.5:1	Reference to 50Ω VSWR
RF Output Impedance ²		1.5:1	Reference to 50Ω VSWR
Supply Voltage Positive		+12V	Small Signal
Supply Current Positive		1100mA maximum	
LVTTL		3mA maximum	

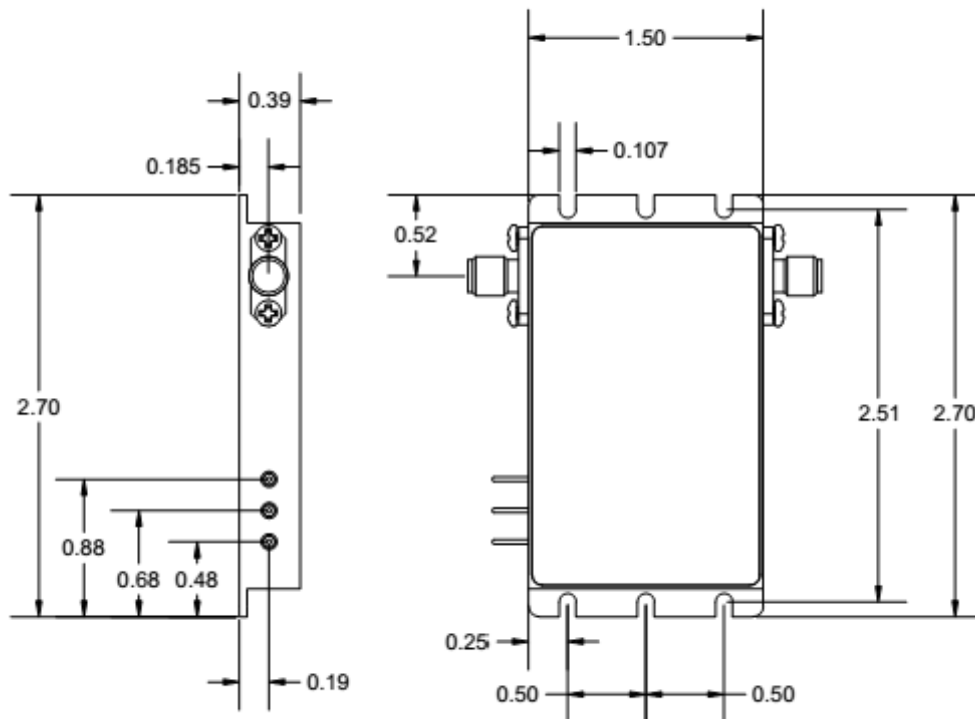
Maximum Ratings¹

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Operating Temperature	OTR	-40		+85	°C	
Storage Temperature	STR	-54		+150	°C	
RF Input power (CW)				+10	dBm	
Die J _{unction}	T _J			+150	°C	
Positive Supply Voltage				+8.5	V	

Notes

Note 1	Unconditional Stability
Note 2	Small Signal

Package Outline: SMA Connectorized (inches)



Field replaceable SMA Connectors LVTTL on/off optional
Housing: Aluminum Gold over Nickel plated

Note: The unit must be attached to proper heat sink with thermal interface material (Thermal Pad or Thermal Grease)

Revision History

Date	Rev	Author	Details of Revision
04-22-25	0	AR	Initial Version