

100 kHz - 30 GHz Broadband RF Amplifier



Features

- Broadband: 100 kHz to 30 GHz
- 22 dBm P_{sat} @ 26 GHz
- 30 dB Gain to 26 GHz
- Useful gain above 30 GHz
- < 5 dB Noise Figure
- Optional Power Detector
- AC Power Supply Included
- Small Size: 3.5" x 3.5" x 1"

Description

The TA0L30VA Amplifier is a high performance, broadband amplifier featuring baseband RF (<100kHz) through millimeter wave (>30 GHz) frequency coverage. The amplifier is designed to be a multi-use laboratory RF Amplifier as a gain block for frequency domain applications or as a time domain pulse amplifier. It's small size and versatile performance make it an excellent selection as a general purpose gain block with moderate power output in a single package potentially replacing 2 or 3 narrower band amplifiers.

Application

The TA0L30VA is an often needed companion to synthesized signal generators and microwave sources. The amplifier's small size allows close placement to the DUT or test fixture. High gain and greater than 20dBm output power will overcome long cable losses from the signal source and provide the additional output power needed in many development and test applications.

Specifications @ 25°C

| Parameter | Description | Minimum | Typical | Maximum |
|----------------------|--|---------|---------|---------|
| S21 (dB) | Small Signal Gain 1 - 26 GHz | 27 | 30 | - |
| S11/S22 (dB) | Input/Output Return Loss 1 - 26 GHz | - | -10 | - |
| Psat (dBm) | Saturated Output Power 100 kHz - 26 GHz | +20 | +22 | - |
| NF (dB) | Noise Figure 2 - 30 GHz | - | 5 | - |
| H ₂ (dBc) | 2nd Harmonic 2 - 25 GHz | - | -30 | - |