



NLCTA-Note #38

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**Subject:** RF Amplifier Specifications

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## 1.0 Introduction

1.0.1 This document describes the specification for the RF 5 W amplifier. The purpose of the RF amplifier is to amplify the RF reference signal. There are no diagnostic signals needed in this component.

## 2.0 RF Amplifier General specifications

Specification	Value
Input Frequency	11.424 ± 0.5 GHz
Input Power	10 dBm (min.)
Output Power	37 dBm (min.) @ 35 °C, -1 dB
Operating temperature	25 - 50 °C
Operating Humidity	20% - 100%
Vibration	N/A

### 2.1 Connector specification

Input Connector	SMA Male
Output Connector	SMA Male

## 2.2 Misc. Specifications

Third order intercept	45 dB (min)
Operating Voltage	15 V (min.)
Operating Current	5 A (max.)
Gain	+27 dB (min.)
VSWR	2:1 max.
Noise Figure	8 dB

## 2.3 Size Specification

Enclosure size	.6"x3"x2" (max.)
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