

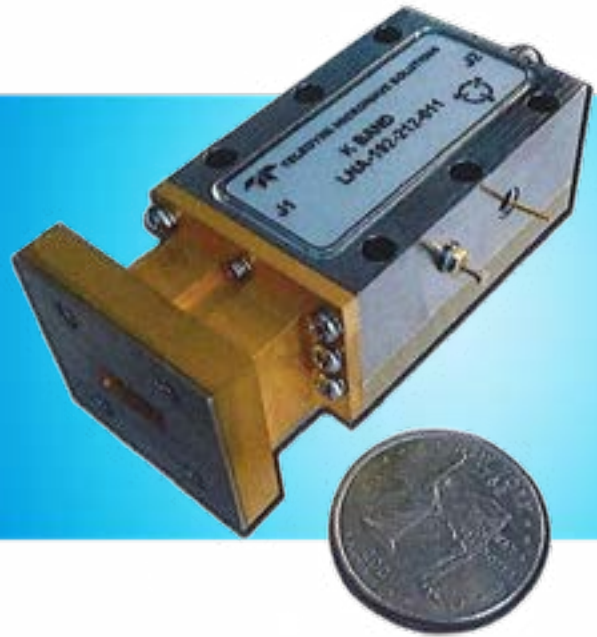
TSA-218020

Ka-Band Low Noise Amplifier

Airborne
Applications

19.2 - 21.2 GHz

EXPORT RESTRICTIONS MAY APPLY



Description

This Ka-Band Low Noise Amplifier (LNA) is designed to meet the extended K-Band Satcom bands and is ideally suited for airborne or SWaP applications where size weight and power are critical. The unit has an industry beating 1.6 dB Noise figure over the full 2 GHz Bandwidth. With a total weight of 0.5 lbs and small size, the unit is ideal for today's integrated light weight Ka-Band terminals.

HEAT SINK WARNING:

This amplifier requires an adequate heat sink to prevent damage. Maximum case temperature must not be exceeded. The package is designed to provide adequate heat transfer to proper aluminum heat sink.

Features

- Small Size Weight and Power
- Operates over 19.2 to 21.2 GHz
- Hermetically Sealed

Other Products

- Low Noise Block Converters (Ku & X-Band)
- Block Up Converters (Ku & X-Band)
- Low Noise Amplifiers (Ku & K-Band)
- Solid State Power Amplifiers (X, Ku & Ka-Band)
- Synthesizers (L, C or X-Band)

Teledyne Microwave Solutions
Aerospace & Defense Electronics



Specifications

Parameter	Value
Noise Figure @ 25°C	130°K(1.6 dB)
Operating Frequency Range	19.2 to 21.2 GHz min/max
Operating Temperature Range	-54 to +95°C min/max
Small Signal Gain	40 dB min, 44 dB max
P1dB	+15 dBm min
3rd OIP	23 dBm
Input Overdrive	18 dBm
In-Band Spurious	-35 dBc max
Group Delay Variation over any 10 MHz	-35 dBc max
AM/PM Conversion	0.1 nsec max
DC Supply Voltage	0.1°/dB max
Current	200 mA
Output Connector	2.92 mm (f)
Input Waveguide	WR-42
Input/Output VSWR	1.4:1
Humidity	100%
Size	1.2" x 2.7" x 1.0"
Weight	0.5 lbs max

Outline Drawing

