



# C-band Warm LNA

## TTI-LNA-C-0408

### C Band LNA for Radioastronomy & Satellite Communications

#### TECHNICAL SPECIFICATIONS

##### ELECTRICAL

Operating frequency range	4-8 GHz
Input VSWR	<1.6:1
Output VSWR	<1.6:1
Amplifier noise figure	<1.3dB
Amplifier gain	>33dB
Amplifier gain slope	+2.4dB
Gain flatness	<1.5dB(peak-to-peak) @4-8GHz, <1dB (peak-to-peak) @any 2GHz portion of this band
Gain compression	1dB @+10dBm
Gain variation with temperature	<0.03dB/°C
Phase variation with temperature	<0.5degrees/°C
Phase variation with frequency	<0.1degree/MHz
Stability	Unconditionally stable
Unconditionally stable	175mA @8.5V DC biased voltage

##### MECHANICAL

RF connector type	SMA
Bias connector type	Feedthrough
	Upper surface with: type number, serial number and identification of the I/O ports

##### ENVIRONMENTAL

Altitude	up to 5000m
Air pressure	1100-500mbar
Temperature storage and transport	-30 to +60°C
Humidity storage and transport	0-100% RH
Temperature unpackaged	15-35°C
Humidity unpackaged	30-70% RH
Nominal operating temperature	25°C
Operating temperature range	15-45°C
EMC requirement	Internal linear DC regulator, reverse voltage protection and DC filter feed-through

##### QUALITY ASSURANCE

Lifetime	>15years
MTBF	>1.000.000hours



#### Key Features

- Compact package
- Broad Band
- Low noise figure

TTI-LNA-C-0408 is a warm broadband low noise amplifier highly integrated in a compact package. It could be customised with different gain slopes, and optimised for specific subbands.