

U R Rao Satellite Centre Indian Space Research Organisation



Ku-Band LNA

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed a Ku-Band LNA used as RF front end to provide low noise figure and to meet the receiver noise figure requirement. The LNA is used in TTC receiver of GEO Satellite.



Salient Features

- → HEMT based 3 stage LNA.
- + Has WR62 waveguide input.
- → 3 stage LNA has wideband spurious free response.
- + Miniaturized LNA, MMIC was packaged using in house packaging solutions.
- + High power mode for Transfer orbit.

Major Specifications

→ Input Signal Frequency (RF) : 12.75 - 13.25 GHz

→ Input Signal Level : -50 to -110 dBm max

+ Noise Figure : 2.5 dB

+ Gain : 22 + 1 dB (typical)

+ Mass : 8.0 gm

+ Power : 60.0 mW

Technology Transfer

URSC/ISRO offers to transfer this technology of Ku-Band LNA to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

