



# Q BAND LNA/LNB RANGE FOR LOAD PULL & SATELLITE COMMUNICATIONS

Using **cutting-edge technology**, the new Q LNB family offers outstanding performance in outdoor operations



State-of-the-art technology provides a very low noise figure at Q band: 38-40 GHz, with superior performance from a highly compact unit.



## **EFFICIENCY & RELIABILITY**

Each unit is fully tested in an environmental chamber and delivered with a complete factory acceptance test report.

Advanced design and construction mean the equipment can be operated in the toughest environments.

Exceptional performance combined with reliability and cost effectiveness.

### **CONFIGURABILITY**

Several options to configure the product at factory are available, including gain, VSWR and noise temperature. Other port configurations, such as coaxial connector can also be supplied, upon request.

# **KEY FEATURES**

- \* Satcom & load-pull applications
- Superior performance
- High reliability & efficiency
- \* Ultra-low noise figure
- \* High gain & low ripple
- \* Low input & output VSWR
- \* Fault alarm
- \* Compact size & lightweight
- \* Weatherproof
- Wide operating temperature range
- \* Redundant configurations (1:1, 1:2, N:1)



## **OPTIONS**

- Coaxial connector
- Redundant systems 1:1, 2:1, N:1
- Indoor controller
  - Extended temperature range:

-40 °C, + 55 °C

# TTI CONTACT

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#### NOTICE\_

Information contained in this document is subject to change without notice.

Unless otherwise specified, tests have been done at 23 °C.

38-40 GHz 262K

#### ELECTRICAL

Output frequency range 950-1950 MHz

Operating frequency range 38-39 GHz / 39-40 GHz

> OL frequency 37.05 GHz / 38.05 GHz

Noise temperature <262 K

Noise figure < 2.8 dB

Input VSWR <1.55:1

Output VSWR (50  $\Omega$ ) <2.0:1

Gain >60 dB

Gain flatness 3 dB pp max

Gain variation over temperature ±2 dB

Output P1dB >10 dBm

3<sup>rd</sup> OIP >20 dBm

Phase noise -62 dBc/Hz @100 Hz

-72 dBc/Hz @1 kHz -82 dBc/Hz @10 kHz -92 dBc/Hz @100 kHz -102 dBc/Hz @1 MHz

External references input frequency 10 MHz

External references input power  $0 dB \pm 3 dB$ 

> <-60 dBc **Spurious**

#### POWER SUPPLY & MONITORING

Input voltage +12 to +24 VDC

Current consumption <350 mA @12 VDC / <175 mA @24 VDC

Fault alarm circuitry Form-C contact closure (option)

#### INTERFACES & PHYSICAL

Dimensions (L x W x H) 145 x 70 x 40 mm

Weight 500 gr

Interfaces RF input flange: UG-383/U

IF output: N (f)

DC: supplied through IF port Monitoring: EGG.0T.309.CLL

External reference: SMA (f)

#### **ENVIRONMENTAL**

Operating temperature -30 °C to +55 °C

Storage temperature -40 °C to +85 °C

Humidity 100 % condensing