ACORDE TECHNOLOGIES

Ka-BAND Low Noise Block (LNB)

Ed.00

ACLNBS-Ka **Standard Series** **17/03/10**

DESCRIPTION

ACLNBS-Ka Standard Series have been designed to meet restrictive specifications for Ka Band communication systems. The equipment has a typical gain of 60 dB with a Noise Figure lower than 1.5 dB typically, with low weight and dimensions. ACLNBS-Ka Standard Series have been tested between -20ºC and +55ºC, providing very good gain stability with temperature.

RECEIVER SPECIFICATIONS

Input Ka-band frequency ..... 19.2 - 21.2 GHz (See options)
Input VSWR ..... < 1.3:1 (max)
Input Stability ..... Unconditionally stable

Output L-band frequency ..... 1.0 - 2.0 GHz
Output VSWR ..... < 2.0:1 (max)
Spectrum inversion ..... None

Gain ..... 60 dB min.
Maximum input level without damage ..... 0 dBm

Gain flatness over the whole bandwidth ..... ± 2 dB
Gain variation over temperature ..... ± 2 dB over the whole range

Noise figure @ 25ºC ..... 1.5 dB typ.
Image Rejection ..... ≥ 45 dB
Output power @ P1dB ..... > +5 dBm
Spurious in Band ..... < -60 dBc @ Pout=0dBm

LOCAL OSCILLATOR

Output phase noise typical (IESS-308/309 – 4 dB):
- 100 Hz ..... -64 dBc/Hz
- 1 KHz ..... -74 dBc/Hz
- 10 KHz ..... -84 dBc/Hz
- 100 KHz ..... -94 dBc/Hz

External frequency reference ..... 10 MHz (at output L-Band Connector)
Reference input level ..... 0 dBm ± 3 dB
Reference stability ..... Slave to external reference

ACORDE • PCTCAN, C/Albert Einstein nº6 • 39011 Santander • Spain
Phone: +34 942 76 44 00 • Fax: +34 942 76 44 03
Web: www.acorde.com

ACORDE TECHNOLOGIES

ACORDE TECHNOLOGIES

Minimum external reference to compliant typical phase noise (IESS-308/309 – 4 dB):

100 Hz ..... -135 dBc/Hz
1 KHz ..... -145 dBc/Hz
10 KHz ..... -155 dBc/Hz

POWER SUPPLY

DC input voltage ..... +9 to +15 VDC (at output L-Band Connector)
DC input current ..... 300 mA typ (at output L-Band Connector)

ENVIRONMENTAL SPECIFICATIONS

Storage temperature ..... -40ºC to +80ºC
Operating temperature ..... -20ºC to +55ºC (see options)
Relative humidity ..... up to 100%
Operating altitude ..... up to 3500 m

MECHANICAL SPECIFICATIONS

Interfaces ..... RX input (Ka-Band): WR42 grooved
RX output (L-Band+DC+Ext. Ref.): Type N(F) 50 Ω
Dimensions ..... 120 x 60 x 40 mm
Weight ..... 400 gr
Finish ..... White

OPTIONS

Frequency band	L-band output	LO frequency	Model Number
19.2 to 20.2 GHz	1.0 to 2.0 GHz	18.200 GHz	ACLNBS-Ka-E1-xxx
20.2 to 21.2 GHz	1.0 to 2.0 GHz	19.200 GHz	ACLNBS-Ka-E2-xxx

LN1: ..... RX output connector type SMA female 50 Ω
LN2: ..... Operating temperature (-40ºC to +55ºC)
LNC: ..... Custom Design

ACORDE

ACORDE • PCTCAN, C/Albert Einstein nº6 • 39011 Santander • Spain
Phone: +34 942 76 44 00 • Fax: +34 942 76 44 03
Web: **www.acorde.com**

ACORDE TECHNOLOGIES