Ka Band LNBs
LNB-KA-1920 / 2021

Ka Band Low Noise Blocks for satellite communications

TECHNICAL SPECIFICATIONS

ELECTRICAL

Input frequency band	
KA-1920 / KA-2021	19.2 – 20.2 GHz / 20.2 – 21.2 GHz
Output frequency band	1 – 2 GHz
Local Oscillator	
KA-1920 / KA-2021	18.2 GHz / 19.2 GHz
Output Spectrum	Not inverted
Noise Figure	< 1.5 dB
Gain	> 60 dB (typ)
Gain flatness over 36MHz	± 0.6dB in any 36MHz
Gain flatness over full bandwidth	± 1.5dB in full band 1GHz (typ)
Gain stability over temperature	± 2dB in full band 1GHz (constant frequency)
Gain stability	± 1dB 24 hours (constant temperature)
P1dB	>10dBm
OIP3	>20dBm
Input VSWR	<2.0:1 (typ)
Output VSWR	<1.6:1 (typ)
Spurious at P1dB	< -60 dBc
SSB Phase Noise	-65dBc/Hz@100Hz, -70dBc/Hz@1KHz, -88dBc/Hz@10KHz, -108dBc/Hz@100KHz, -113dBc/Hz@1MHz
External Reference	10MHz, 0dBm±3dB (via IF Output Connector)
Power Supply Voltage	9 to 18 VDC (supplied through IF Output Connector)
Power consumption	300mA (9V), 150mA (18V)

INTERFACES & PHYSICAL

Input RF connector	WR-42
Output RF connector	N (f)
Size	105 x 44 x 40 mm
Weight	<250g

ENVIRONMENTAL

Operating temperature	-30ºC to 55ºC
Storage temperature	-40ºC to +85ºC
Humidity	100% Condensing

Key Features

- Low noise figure
- High reliability
- Superior performance

The Ka-band LNB Series are the Low Noise Blocks which converts the satellite signal from Ka band to L band (1-2 Ghz). The equipment has a minimum gain of 60 dB, and a noise figure lower than 1.5 dB. It provides a combination of superior performance, reliability and cost effectiveness.