



Internal Reference Type Palapa C-band PLL LNB

MODEL NO. NJS8476H / S

Internal Reference Type C-band PLL LNB

MODEL NO. NJS8477H / S

Internal Reference Type Insat C-band PLL LNB

MODEL NO. NJS8478H / S, NJS8479H (LO:5.95GHz)

<Description>

This specification defines the Low Noise Amplifier and block downconverter intended for the satellite data communication downlink application in 3.400 to 4.200 GHz / Palapa C-band, 3.625 to 4.200 GHz / C-band and 4.500 to 4.800 GHz, Insat C-band.

These LNBs have a combined 3-stage HEMT amplifier and block downconverter with Phase Locked Local Oscillator which is constituted with a S-band VCO, Multiplier, Loop Filter and TCXO providing high stability and low phase noise. All specifications shall apply throughout the range of the specified environmental conditions unless otherwise specified.

<Line-Up>

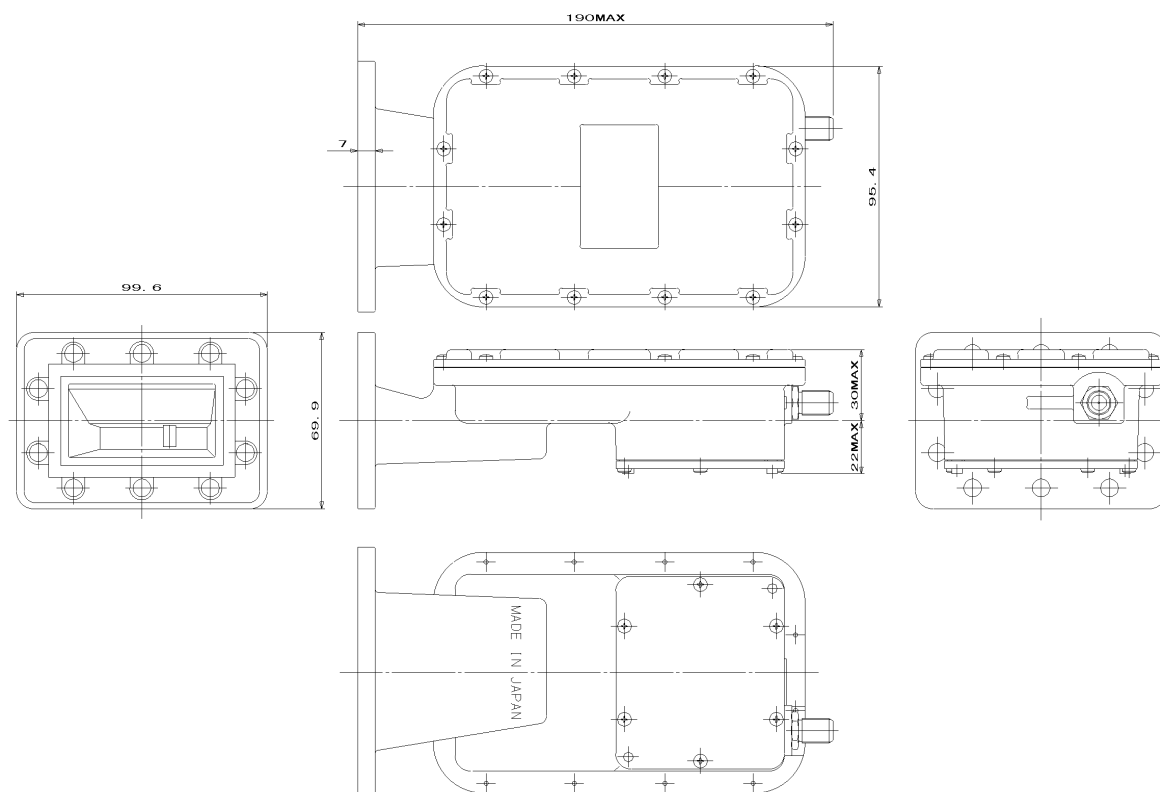
Model No.	RF Frequency	Local Frequency	Local Stability [-40 to +60 °C]	IF Frequency	Application
NJS8476H	3.400 to 4.200 GHz	5.15 GHz	+/- 10 ppm	950 to 1,750 MHz	Palapa
NJS8476S			+/- 3 ppm		
NJS8477H	3.625 to 4.200 GHz	5.15 GHz	+/- 10 ppm	950 to 1,525 MHz	Standard
NJS8477S			+/- 3 ppm		
NJS8478H	4.500 to 4.800 GHz	5.76 GHz	+/- 10 ppm	960 to 1,260 MHz	Insat
NJS8478S			+/- 3 ppm		
NJS8479H		5.95 GHz	+/- 10 ppm	1,150 to 1,450 MHz	

<Specifications>

Item	Specifications
Input Waveguide Flange	CPR-229
Output Connector	Type F-female (option: N-female)
Noise Temperature (at 25 °C)	35 K
Conversion Gain (at 25 °C)	59 dB min.
Conversion Gain Variation (at 25 °C)	5 dB max. (NJS8477H / 77S / 78H / 78S / 79H) 8 dB max. (NJS8476H / 76S)
Local Oscillator Frequency Stability	NJS8476H : 5.15 GHz +/- 10 ppm (Ta: -40 to +60 °C) NJS8476S : 5.15 GHz +/- 3 ppm (Ta: -40 to +60 °C) NJS8477H : 5.15 GHz +/- 10 ppm (Ta: -40 to +60 °C) NJS8477S : 5.15 GHz +/- 3 ppm (Ta: -40 to +60 °C) NJS8478H : 5.76 GHz +/- 10 ppm (Ta: -40 to +60 °C) NJS8478S : 5.76 GHz +/- 3 ppm (Ta: -40 to +60 °C) NJS8479H : 5.95 GHz +/- 10 ppm (Ta: -40 to +60 °C)
Phase Noise (SSB)	-63 dBc/Hz at 100 Hz -73 dBc/Hz at 1 kHz -83 dBc/Hz at 10 kHz -90 dBc/Hz at 100 kHz

Item	Specifications
Spurious	-140 dBm max. At input, fixed frequency spur, unrelated to test CW signal. -55 dBc max. With test CW signal -10 dBm IF output (measured at specified IF band ; 950 to 1750 MHz or 950 to 1,525 MHz or 960 to 1,260 MHz or 1,150 to 1,450 MHz)
Power Requirement	+13.5 to +24Vdc
Power Consumption	350 mA max.
Operating Temperature Range	-40 to +60 °C
Storage Temperature Range	-40 to +80 °C

<Outline Drawing>



Unit: mm

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