

C-band Filter / LNA

Example Specification:

Parameter	Specification
Filter Passband	4200 -4600 MHz
Filter Passband Insertion loss	0.45 dB max
Filter Passband Return Loss	14 dB min
Filter Out of Band Rejection	60 dB min @ 10 – 3800 MHz 40 dB min @ 5000 – 11000 MHz
LNA Passband Frequency	4200 – 4600 MHz
LNA Passband Gain	23 dB typical, 25dB max
LNA Passband Gain Variation (Flatness)	0.8 dB max
LNA Voltage Supply	Any voltage between +5 to +20 Vdc
LNA Current Consumption	120 mA max
LNA Output P1dB	0 dBm min
LNA Passband Noise Figure	0.8 dB max
Total Passband Noise Figure (Filter+LNA)	1.1 dB typical at 25 °C 1.25 dB max at 25 °C
Passband Phase Difference between each units (Phase Match in a set)	± 1° max
Impedance (Input/Output)	50 Ohm
Connectors (Input/Output)	SMA female
Integrated Package Dimensions (Filter+LNA)	6.75 x 1.0 x 0.85 inches + SMA Connectors
Operating Temperature	-10 °C to + 70 °C



Overview

NIC introduces a ruggedized C-band Filter / LNA for use in eliminating interference caused by navigational communications (radar) of commercial and military aircraft, as well as coastal and marine vessels operating above and below the C-band. This Filter / LNA offers 23dB gain and a low noise figure of 1.1dB in a hermetically sealed package.

Features

- Low Noise figure (1.1dB Typical (Filter + LNA))
- High Selectivity
- Phase matching as low as ± 1°
- Hermetically sealed package
- Ruggedized design to meet MIL-STD- 810 requirements



Passband:



Noise Figure:

