

# 4109AF

## 4000A Ku-Band Single Band PLL LNB

**L.O Stability:** 1:  $\pm 150$  kHz

**Noise Figure:** 0.9 dB

**Output Connector:** F: 75 Ohm



## KEY SPECIFICATIONS

|                         |                   |
|-------------------------|-------------------|
| Band                    | Ku-Band           |
| Input Frequency Band 1  | 11.70 - 12.20 GHz |
| LO Frequency 1          | 10.75 GHz         |
| LO Stability            | $\pm 150$ kHz     |
| LO Type                 | PLL               |
| Noise Figure Max        | 1.0 dB            |
| Noise Figure Typ        | 0.9 dB            |
| Number Of Onboard Los   | Single-Band       |
| Output Frequency Band 1 | 950 - 1450 MHz    |

## RF SPECIFICATIONS

|                                |                      |
|--------------------------------|----------------------|
| Conversion Gain Max            | 70 dB                |
| Conversion Gain Min            | 55 dB                |
| Conversion Gain Typ            | 60 dB                |
| Gain Flatness (over Full Band) | $\leq 4$ dB p-p max. |
| Input VSWR                     | 2.5 : 1 max.         |
| Output P1db                    | + 2 dBm min.         |
| Output VSWR                    | 2.5 : 1 max.         |
| Phase Noise 1khz Offset Max    | -70 dBc/Hz           |
| Phase Noise 10khz Offset Max   | -80 dBc/Hz           |
| Phase Noise 100khz Offset Max  | -90 dBc/Hz           |

## ELECTRICAL SPECIFICATIONS

|                     |                |
|---------------------|----------------|
| Current Consumption | 300 mA max.    |
| Power Requirements  | +15 to +24V DC |

## INTERFACE SPECIFICATIONS



## Innovative Communication Solutions

IF Connector

F-Connector

RF Input Connector

WR-75 waveguide grooved

## ENVIRONMENTAL SPECIFICATIONS

IP Rating

IP 67

Temperature Operational

-40°C to +60°C

Temperature Storage

-40 to +80°C

## PHYSICAL SPECIFICATIONS

Product Height

43 mm

Product Length

85 mm

Product Weight

0.2 kg

Product Width

43 mm

## LOGISTICS SPECIFICATIONS

HS Code

Country of Origin

Ex Works

ECCN Number

Unit Package

8517690000

Made in the Republic of  
Korea

Richmond, BC, Canada

EAR99

110 x 55 x 50 mm | 0.2  
kg

## HOW TO ORDER

# 4107AN

CONNECTOR

F - 75 Ohm

N - 50 Ohm

FREQUENCY

A - 11.70 - 12.20 GHz

B - 12.25 - 12.75 GHz

C - 10.95 - 11.70 GHz

NOISE FIGURE

07 - 0.7 dB

08 - 0.8 dB

09 - 0.9 dB

L.O. STABILITY

1: ±150 kHz

2: ±250 kHz

5: ±500 kHz

LNB SERIES #

## MECHANICAL DIAGRAMS



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