

### General Description

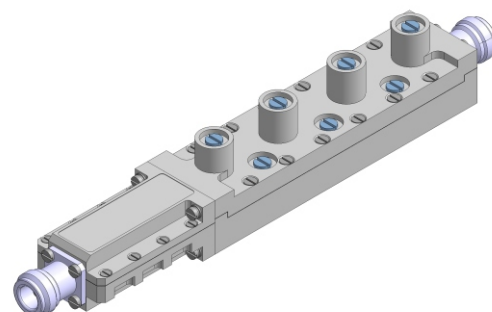
The MCS-FLNA-1621-25-30 is a low-noise amplifier with an input filter, with a high gain, low noise figure. N-type input and output, the supply voltage is supplied via the output connector. Operating frequency can be changed in the range from 1000 MHz to 2000 MHz

### Key Features

- Ultra-low noise figure with narrow bandwidth
- High gain at a narrow bandwidth
- Wide range of supply voltages

### Application

- Ultra-low noise figure with narrow bandwidth
- Mobile communication systems
- Space communication systems



### Specification (at 25°C)

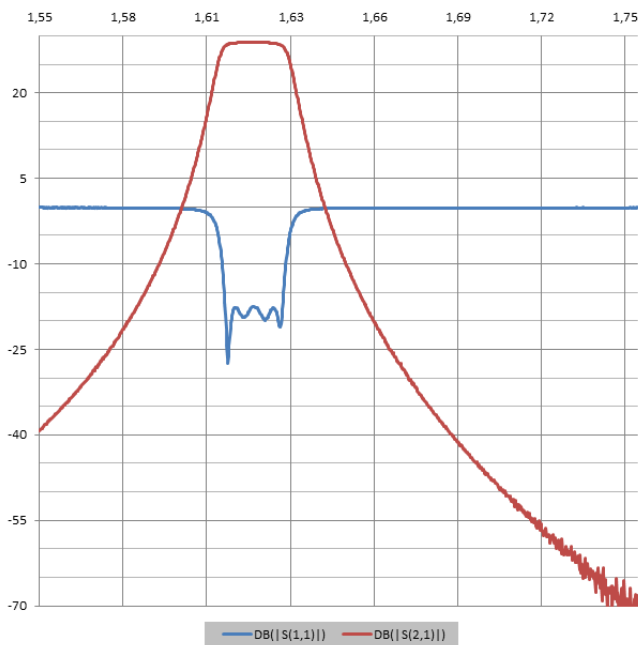
| Parameter                                                            | Sym.               | Min.      | Typ.          | Max.        | Unit     |
|----------------------------------------------------------------------|--------------------|-----------|---------------|-------------|----------|
| Frequency*                                                           | F                  | 1615      |               | 1627        | MHz      |
| Input VSWR                                                           | S <sub>11</sub>    |           | 1.35:1        | 1.5:1       |          |
| Output VSWR                                                          | S <sub>22</sub>    |           | 1.5:1         | 1.7:1       |          |
| Bandwidth @-3 dB**                                                   | f <sub>-3 dB</sub> | 22        | 1.5<br>23.5   | 25          | %<br>MHz |
| Gain                                                                 |                    | 27        | 28.5          | 30          | dB       |
| Frequencies below @ -60 dB                                           |                    | DC - 1560 |               | 1675 -15000 | MHz      |
| Noise in the bandwidth                                               |                    |           | 1.05          | 1.3         | dB       |
| 1 dB compression                                                     | IP <sub>1</sub>    | -8.5      | -7.5          |             | dBm      |
| Third-Order Intercept                                                | IP <sub>3</sub>    | 4         | 6             |             | dBm      |
| Supply voltage                                                       | V <sub>cc</sub>    | 6.5       | 12            | 15          | V        |
| Supply current                                                       | I                  |           | 180           | 200         | mA       |
| Wave impedance input/output                                          | Z                  |           | 50?           |             |          |
| The deviation of the frequency<br>-65 °C@+25 °C                      |                    |           | +0.14<br>+2.3 |             | %<br>MHz |
| The deviation of the frequency<br>+80 °C@+25 °C                      |                    |           | +0.12<br>-2   |             | %<br>MHz |
| * - the operating frequency can be changed from 1000 MHz to 2000 MHz |                    |           |               |             |          |
| **- parameter can be changed according to customer requirements      |                    |           |               |             |          |

**Absolute maximum parameters**

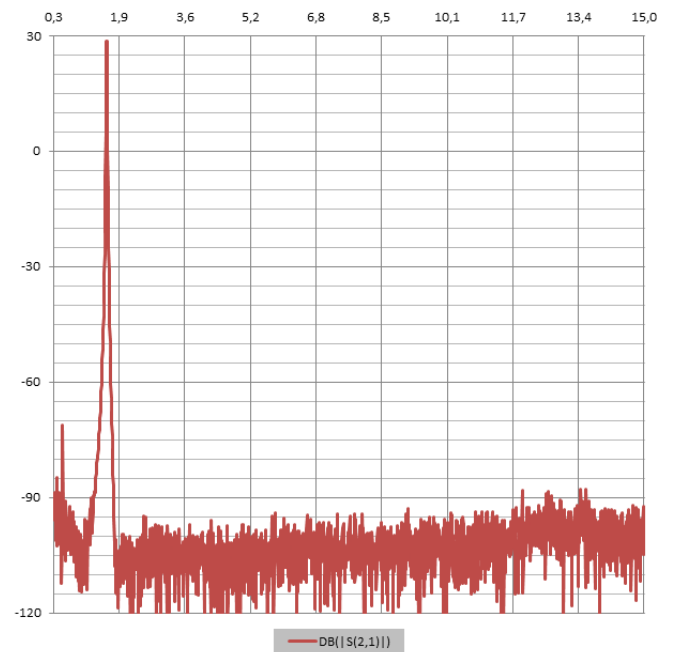
| Parameter           | Sym. | Value | Unit |
|---------------------|------|-------|------|
| Supply voltage      | Vcc  | 20    | V    |
| Storage Temperature | P    | 10    | dBm  |

**S – Parameters**

In-Band Response (1.55 – 1.75 GHz)



Out-Band Response (0.3 – 15 GHz)



**Physical dimensions**

