



**KA-100**  
Single Linear LNB

| PARAMETERS  | SPECIFICATION |         |      |        | CONDITION   |
|---|---------------|---------|------|--------|---|
|   | Min.          | Typical | Max. | Unit   |   |
| Input Frequency Range   | 19.7          |         | 20.2 | GHz    |   |
| Local Oscillator Frequency  |               | 18.75   |      | GHz    |   |
| Output Frequency Range  | 950           |         | 1450 | MHz    |   |
| LO Frequency Stability,<br>Initial & Over 10-Year Lifetime<br>Frequency |               |         | ±2   | MHz    | @ -34 ~ 52° C   |
| LO Signal Radiation   |               |         | -43  | dBm    |   |
| Conversion Gain   | 50            |         | 62   | dB     | @ -34 ~ 52° C   |
| Gain Variation over 500 MHZ   |               |         | ±3   | dB     | @ 23° C   |
| Max Input Power Operating   |               |         | -70  | dBm    |   |
| Noise Figure  |               |         | 1.6  | dB     | @ 23° C   |
| LO Phase Noise  |               |         | -64  | dBc/Hz | @5KHz offset under Vibration                              |
|   |               |         | -70  | dBc/Hz | @ 10KHz offset under Vibration                            |
|   |               |         | -90  | dBc/Hz | @ 100KHz offset under Vibration                           |
|   |               |         | -110 | dBc/Hz | @ 1MHz offset under Vibration                             |
| Image Rejection   | 40            |         |      | dB     |   |
| Input Spurious Rejection to:<br>Tx in-band<br>Tx out-of-band            |               | -30     |      | dBm    | Apply to LNB RF input, and LNB shall not degrade          |
| Output 3 <sup>rd</sup> Order Interception<br>(IP3) Point                |               | 10      |      | dBm    |   |
| In-band Spurious Output Level   |               | -30     |      | dBc    |   |
| Immunity to Surge & Lightning<br>ESD                                    |               |         |      |        | Air: ±15KV with no damage<br>Contact: ±8KV with no damage |
| Surge   |               | 3       |      | KV     | With no damage  |
| Output Impedance  |               | 75      |      | Ohms   | Female F connector  |
| Output VSWR   |               |         | 2:1  |        | @75 ohms system   |
| 1dB Compression Point   | 0             |         |      | dBm    | Output Power  |
| Power Supply Current Drain  |               | 125     | 150  | mA     | @ 23° C   |
| Power   | +12           |         | +24  | VDC    |   |

**SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE**

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