



# HS1059AF

## 1000 Ku-Band Single Band PLL LNB

L.O Stability:  $\pm 5$  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            | $\pm 5$ 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            | 65 dB           |
| Conversion Gain Min            | 55 dB           |
| Conversion Gain Typ            | 60 dB           |
| Gain Flatness (over Full Band) | $\leq 5$ dB p-p |
| Input VSWR                     | 2.5 : 1 max.    |
| Output P1db                    | + 4 dBm min.    |
| Output VSWR                    | 2.2 : 1 max.    |
| Phase Noise 100khz Offset Max  | -90 dBc/Hz      |

### ELECTRICAL SPECIFICATIONS

|                     |                |
|---------------------|----------------|
| Current Consumption | 300 mA max.    |
| Power Requirements  | +12 to +24V DC |

### INTERFACE SPECIFICATIONS

|                    |                         |
|--------------------|-------------------------|
| IF Connector       | F-Connector             |
| RF Input Connector | WR-75 waveguide grooved |

### M and C SPECIFICATIONS



Led Indicators

None

## ENVIRONMENTAL SPECIFICATIONS

|                         |              |
|-------------------------|--------------|
| Temperature Operational | -40 to +60°C |
| Temperature Storage     | -40 to +60°C |

## PHYSICAL SPECIFICATIONS

|                |        |
|----------------|--------|
| Product Height | 42 mm  |
| Product Length | 110 mm |
| Product Weight | 0.3 kg |
| Product Width  | 42 mm  |

## LOGISTICS SPECIFICATIONS

| HS Code    | Country of Origin | Ex Works             | ECCN Number | Unit Package     |
|------------|-------------------|----------------------|-------------|------------------|
| 8517690000 | Made in Japan     | Richmond, BC, Canada | EAR99       | 140 x 50 x 50 mm |

## HOW TO ORDER

### HS1048AF

|                |  |
|----------------|--|
| CONNECTOR      | F - 75 Ohm<br>N - 50 Ohm   |
| FREQUENCY      | A: 11.70 - 12.20 GHz<br>B: 12.25 - 12.75 GHz<br>C: 10.95 - 11.70 GHz |
| NOISE FIGURE   | 7 - 0.7 dB<br>8 - 0.8 dB<br>9 - 0.9 dB                               |
| L.O. STABILITY | 2: ± 2 kHz<br>3: ± 3 kHz<br>4: ± 4 kHz<br>5: ± 5 kHz                 |
| LNB SERIES #   |  |

## MECHANICAL DIAGRAMS

