

C-BAND INDIASAT PLL LNB

MODEL PLV804I

ELECTRICAL SPECIFICATIONS

| No | Item | Specification | Rev. | Remarks |
|-----|--------------------------------|--|------|---------|
| -1 | RF Input Frequency | 4.5 to 4.8 GHz | | |
| -2 | IF Output Frequency | 1150 to 1450 MHz | | |
| -3 | Local Frequency | 5.95 GHz | | |
| -4 | Local Frequency Stability | +/-5ppm max. @ -30°C to +50°C | | |
| -5 | Local Frequency Initial Offset | +/-2ppm max. @ +25 | | |
| -6 | Local Phase Noise | -55dBc/Hz max. @100Hz -65 dBc/Hz max. @1kHz -75 dBc/Hz max. @10kHz -85 dBc/Hz max. @100kHz -95 dBc/Hz max. @1MHz | | |
| -7 | Local Oscillator Leakage | -50 dBm max. @ Waveguide input. | | |
| -8 | Noise Temperature | 50 K max. @+25°C | | |
| -9 | Gain | 55 to 70 dB @ Over frequency & temperature | | |
| -10 | Gain Ripple | 1dBp-p max per 27 MHz segment across the operating frequency band @+25°C | | |
| -11 | Input VSWR | 3.0: 1typical (w/o isolator) | | |
| -12 | Output VSWR | 2.5:1 typical @ 75 ohms | | |
| -13 | Image Rejection | 45 dB min. | | |
| -14 | 1 dB Gain Compression Point | +0 dBm min. | | |
| -15 | Spurious in Rx Band | -124dBm max. @ Waveguide input excluding Rx out±1MHz. Measure at RF Input power -85dBm | | |
| -16 | RF Input Stability | Conditionally stable (No oscillation) Source input VSWR < 3.0:1 at any phase angle. (w/o isolator) | | |
| -17 | Input Voltage | +15 to +24 V @ Supplied through center conductor of the IF cable. | | |
| -18 | Current | 500 mA max. | | |
| -19 | IF Output Stability | No oscillation when IF output is shorten at any phase angle or it's electrical equivalent conditions of termination. | | |

MECHANICAL SPECIFICATIONS

| No | Item | Specification | Remarks |
|----|------------------|---|---------|
| -1 | Input Interface | CPR-229G, Waterproof with groove | |
| -2 | Output Interface | F-Type, 75 Ω, female, Waterproof Fit center conductor 0.028 to 0.045 "dia. | |
| -3 | Size | 165(L) mm x 98(W) mm x 69(H) mm max. | |
| -4 | Weight | approx. 700 g | |
| -5 | Paint/Color | White, Munsell N9.5 Semi-gloss | |
| -6 | Label | SPC Label | |

ENVIRONMENTAL SPECIFICATIONS

The unit will be sealed and will meet the best commercial environmental specifications for exposure to precipitation, water, sand, salt, dust and sun, etc.

| No | Item | Specification | Remarks |
|----|-----------------------|------------------------------------|---------|
| -1 | Operating Temperature | -30°C to +50°C | |
| -2 | Storage Temperature | -40°C to +60°C | |
| -3 | Thermal Gradient | -40°C/Hour | |
| -4 | Relative Humidity | Up to 100%, condensation and frost | |
| -5 | Altitude | Up to 10,000 feet @ Operating | |

