

Module Specification sheet

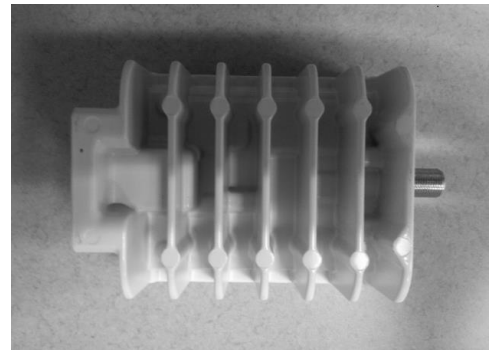
4W Full KU 13.75-14.5GHz BUC Transmitter

PN: AN7074

Comply to be integrated and operate with SE-IIc VSATs

Input interface & signals

- Interfaces
 - Coax connector F-Type female (75Ω)
 - Grounding hole (M4 thread)
- Input signals:
 - DC
 - External Reference
 - L Band IF Signals



Output interface & signals

- Interface: Waveguide WR-75 grooved (M4 thread * 4)
- Output signals:
 - Full KU Band RF Signals

IF Input Characteristics

- Frequency range: 950-1700MHz
- Max Input level (without damage): +13dBm
- VSWR: 2.0 : 1

Local Oscillator Characteristics

- L.O Frequency: 12800MHz
- Phase Noise (SSB)
 - 100Hz: -55dBc/Hz
 - 1KHz: -65dBc/Hz
 - 10KHz: -75dBc/Hz
 - 100KHz: -85dBc/Hz
 - 1MHz: -95dBc/Hz

- External Reference requirement
 - Frequency: 10MHz
 - Form: Sinus wave
 - Uncertainty: -35ppm to +35ppm
 - Power level: -5dBm to +5dBm
 - Phase Noise (SSB)
 - 100Hz: -125dBc/Hz
 - 1KHz: -135dBc/Hz
 - 10KHz: -140dBc/Hz

RF Output Characteristics

- Frequency range: 13750-14500MHz
- VSWR: 2.0 : 1
- Typical Saturated output power: 4W (36dBm)
- Typical output power @P1dB: 3W (34.8dBm)
- Min output power @P1dB
Vs. all operational conditions (frequency and temperature): 2.5W (34dBm)
- ACPR @34dBm output power: 26dBc typical
- Small Signal Gain: 58dB typical
- Mute function: RF output will turn off when L.O is unlocked

DC Characteristics

- Operational Voltage range: +13V to +26V
- None damage Voltage range: 0V to +30V
- Power Consumption: 23W max.

Environmental Conditions

- Operational Temperature range: -40°C to +55°C
- Storage Temperature range: -40°C to +75°C
- Humidity: 0 to 100%
- Water/Dust proof (IP Code): IP67

Physical Characteristics

- Weight: <0.5Kg
- Dimensions: < (L)110 x (W)70 x (H)45 mm
- Humidity: 0 to 100%