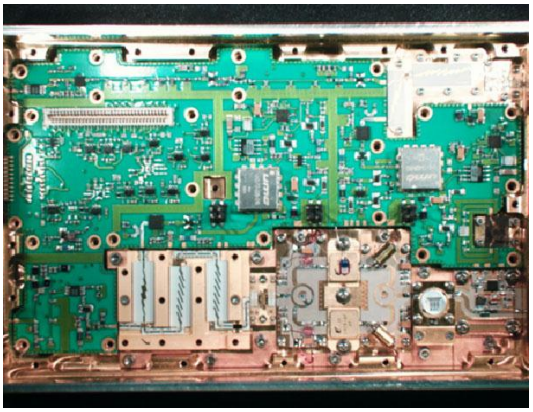
6139-6605 - KU-BAND UP/DOWN CONVERTER

TECHNICAL FEATURE

FEATURES

- Extremely High Power Added Efficiency (PAE) Output Amplifier
- High Transmit Power
- Integrated High Efficiency DC/DC Converter
- High linearity transmit path



PERFORMANCE

Frequency Range ..... 14.5 - 15.5 GHz
Transmit Gain.....58 dB nominal
Transmit Output Power (P1dB)..... +40 dBm min.
Transmit Output IP3..... +41 dBm min.
Transmit Phase Noise (100KHz offset) ..... -95 dBc/Hz
Receive Gain.....50 dB nominal
Receive Noise Figure .....10 dB max
Receive Phase Noise (100 KHz offset) ..... -95 dBc/Hz
Phase Control ..... 360° in 11.25° steps
Operating Voltage (input) ..... +28 VDC nominal
RF Connection Interface.....SMA Female
Connector (power and control).....21 & 25 pin Micro D
Operating Temperature Range.....-40 to +55° C
Package Size ..... 1.40" x 4.01" x 6.45"

DESCRIPTION

The 6139-6605 Ku-Band Up/Down Converter incorporates advanced amplifier and integration technology to provide a highly-integrated complete solution for advanced data link applications. The device readily interfaces with digital transceivers to provide a compact and efficient end-item solution.

Advanced surface-mount techniques have been employed to optimize the cost position of the manufactured unit in production. The transmit output stage utilizes custom designed matched high-performance MMICs to achieve the compact size and operating performance desired. Complementing the high-performance output stage is a high-efficiency DC/DC converter to avoid the need for additional external components.

The design is intended for use in a critical military environment including wide temperature excursions along with shock and vibration. These advanced techniques and circuit topologies can be applied to many other applications and specific requirements. Please contact us with your specifications.

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