TECHNICAL FEATURE

FEATURES

- Ultra-compact Dual-Channel Integrated Package
- High Transmit Power
- Novel Digital Compensation and Alignment
- Rugged Hermetically Sealed Chip and Wire Construction

PERFORMANCE

Frequency Range.......................... 14.5 - 15.5 GHz
Transmit Gain.................................. 55 dB nominal
Transmit Output Power (P1dB).................. +33 dBm
Transmit Output IP3 ........................... +41 dBm min.
Receive Gain.................................. 47 dB nominal
Receive Noise Figure........................ 3 dB max
Gain Control.................................. 8 dB in 0.5 dB steps
Phase Control.................................. 360° in 11.25° steps
Operating Voltage (input)...................... +8 and -6 VDC
RF Connection Interface....................... GPO Female
Connector (power and control).............. 54 pin Micro D
Operating Temperature Range.............. -40 to 90° C
Package Size................................ 2.2” x 4.1” x 0.40”

DESCRIPTION

The 6139-6618 Ku-Band Transmit/receive Module incorporates a fully functional dual-channel transceiver capability in a miniature, highly integrated package. High-performance MMIC based power amplifier is incorporated with a high-sensitivity receive front-end, providing a unique, high-performance system.

The device also incorporates a unique digital interface which provides both dynamic performance adjustment during the fabrication stage, as well as compensation over the operating conditions.

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.