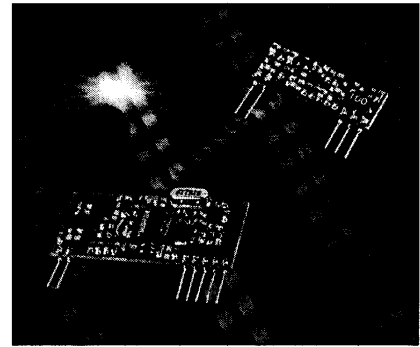


352439 S
352440 I

QUASAR

868MHz FM Radio Transmitter and Receiver

- MINIATURE SIL PACKAGE
- DATA RATES UP TO 10KBITS/S
- OPTIMAL RANGE 250m
- SAW STABILISED QUASI AM/FM TRANSMISSION
- 3 TO 9 VOLT SUPPLY VOLTAGE
- INDUSTRY PIN COMPATIBLE
- VERY HIGH SENSITIVITY (-110 dBm)
- VERY LOW CURRENT CONSUMPTION
- IMMUNE TO FM THRESHOLD EFFECT



Applications

- VEHICLE ALARM SYSTEMS
- REMOTE GATE CONTROLS
- GARAGE DOOR OPNERS
- DOMESTIC AND COMMERCIAL SECURITY

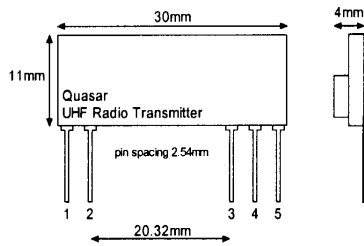
These Single in Line (SIL) miniature UHF radio transmitter and receiver pair provide a low cost PCB mounting module capable of transmitting data at distances of up to 250m in direct Line of sight.

The modules operate at 868MHz which is the new European wide Licence free Radio Frequency.

The Quasar transmitter module implements a unique quasi AM/FM modulation scheme that puts the baseband data signal onto the RF carrier in two different ways. Firstly the carrier is shifted in frequency (typically 20 KHz) which generates the normal FSK spectrum, but simultaneously the RF carrier is also amplified thus yielding the ASK spectrum.

Because of its small size and low power requirements, this modules is ideal for use in portable battery powered wireless applications

Transmitter Connection Details



Pin No	Signal
1	RF GND
2	RF OUT
3	V _{CC}
4	GND
5	Data IN

Receiver Connection Details

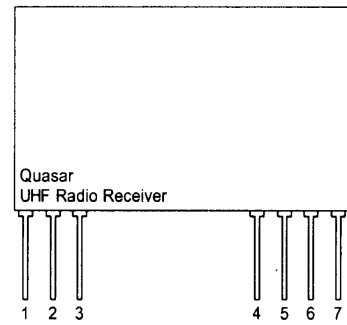


Figure 1: Quasar Receiver

Pin No	Signal
1	V _{CC}
2	GND
3	Antenna
4-6	No connection
7	Data Output

Technical Data

Transmitter

Supply voltage	3-9V
Supply current(V _{CC} =5V)	12mA (max)
Bit rate	10Kbps
Operating Frequency	969.35MHz
Overall frequency accuracy	+/-100KHz
Power up time to full RF	10μs

Receiver

Supply voltage	5V
Supply current	2mA
Data output high	=>4.5
Data output low	<= 0.5V
RF sensitivity	-110DBm
Bit rate	10Kbps

Part Number	Description
QFMT1-868	SIL Transmitter (868.35MHz)
QMR1-868	SIL Superhet Receiver (868.35MHz)