High Selectivity UHF ASK Receiver

AU-434-S

Features

- Fully integrated PLL with low phase noise VCO, PLL, and loop filter
- · High sensitivity
- Supply current: 8mA in Active Mode (5V, 25°C, ASK Mode)
- Data rate: 1Kbit/s to 10Kbits/s Manchester ASK, 1Kbit/s to 20Kbits/s Manchester FSK with four programmable bit rate ranges

 The receiver uses a low-IF architecture with high selectivity, blocking, and low intermodulation (typical 3-dB blocking 68.0dBC at ±3MHz/74.0dBC at ±20.0MHz, system I1dBCP =-31dBm/system IIP3 = -24dBm)

- Telegram pause up to 52ms supported in ASK Mode
- Wide bandwidth AGC to handle large out-of-band blockers above the system I1dBCP
- 440 kHz IF frequency with 30 dB image rejection and 420 kHz IF bandwidth to support PLL transmitters with standard crystals or SAW-based transmitters
- ESD protection at all pins (±4kV HBM, ±200V MM, ±500V FCDM)



TECHNICAL SPECIFICATION

Min	Тур	Max	Unit
4.5	5	5.5	Vdc
	7.5	8.6	mA
	433.92		MHz
-112	-116	-118	dBm
	420		KHz
60			dB
VCC-0.2V			V
		0.2	V
		0.3	ms
-20		+85	°C
	Min 4.5 -112 60 VCC-0.2V -20	Min Typ 4.5 5 7.5 433.92 -112 -116 420 420 60 VCC-0.2V -20 -20	Min Typ Max 4.5 5 5.5 7.5 8.6 433.92 -112 -116 -118 420 -118 -118 60 0.2 0.3 -20 -106 +85

Information subject to change without notice

Ta = 25 °C

MODULE AU434-S



1 2

1. GROUND 2. ANTENNA **3. GROUND 4. NO CONNECT 5. TEST POINT** 6. DATA OUT 7. +5 Volt DC

7

DECLARATION OF CONFORMITY

AUTOTECH - G .KAPSALIS 8, Archimidous str. 12134 Peristeri Athens, Greece, Tel: +302105780019, Fax: +302105785112 In accordance with the following directives:

4

Radio & Telecommunications Terminal Equipment

- directive 1999/5/EC
- EN300220-3 sub-clause 8.4.1

hereby declare that:

Product : Receiver Module AU-434-S (Incorporated in JK-4921S) Model : AU434S

is in conformity with the applicable requirements of the following documents.

EN300220-3 sub-clause 8.6.1.a.1

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The unit complies with all the applicable essential requirements of the directives mentioned.

Name: Apergis Antonios Position: Technical Director Peristeri, 28 November 2013

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