

433.92 MHz SUPER-REGENERATIVE ASK/OOK RECEIVER

Mod. "3V VERSION – VERY LOW CONSUMPTION" / P.n. 3-2000495A

DESCRIPTION:

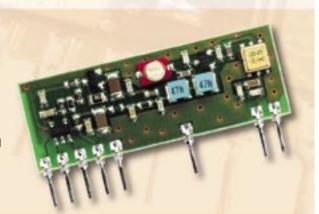
ASK/OOK receiver based on super regenerative principle, with front-end SAW filter.

HIGHLIGHTS:

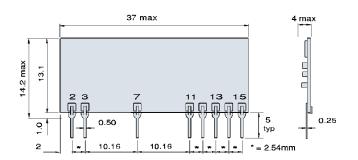
Developed according to I-ETS 300 220 European Standard. Typical current supply 70 μA

APPLICATIONS:

Battery or solar energy applications, self powered sirens for wireless alarms, in general applications that require very low consumption.



MECHANICAL CHARACTERISTICS



Pin functions

1 = absent

2 = GND

 $3 = RF Input (50\Omega)$

7 = GND

11 = GND

12 = + 3Vdc

13 = T. P. (Not used)

14 = TTL Output15 = + 3Vdc

ABS. MAX. RATINGS:

| Power supply, Vcc, pin 12, 15: | + 8 Volt |
|---|-----------------|
| Radio frequency input, pin 3: | +10 dBm |
| Voltage, with respect to GND, of output pins: | Vcc |
| Storage Temperature: | - 40 ÷ + 100 °C |
| Operational Temperature: | - 20 ÷ + 70 °C |

ELECTRICAL CHARACTERISTICS AT THE TEMPERATURE OF + 25°C.

| Parameter | Min. | Тур. | Max | Unit | Notes |
|--|--------|--------|--------|------|-------|
| Power Supply (Vcc) | 2.3 | 3 | 3.5 | Volt | |
| Supply Current | - | 70 | - | μΑ | |
| Center Frequency | 432.82 | 433.92 | 434.02 | MHz | |
| Sensibility (mod. 99%, square wave 1kHz) | - | -93 | - | dBm | |
| S/N ratio for a -90dBm Input Signal | - | 17 | - | dB | |
| RF Bandwidth at -3dB | - | ±1 | - | MHz | |
| Antenna Spurious RF Emission | - | - | -60 | dBm | |
| Baud rate | - | - | 2400 | Baud | |
| Logic Low | 0 | 0.02 | 0.05 | Volt | |
| Logic High | 2.8 | 2.95 | - | Volt | |
| Adjustment time at "power ON" | - | 800 | - | msec | |
| Output Impedance | - | 50 | - | Kohm | |

Note 1: All RF characteristics are measured with the input (pin3) connected to a 50 ohm impedance source or load.

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