

# 433.92 MHz SUPER-REGENERATIVE ASK RECEIVER

Mod. "3V VERSION - LOW CONSUMPTION" / P.n. 2-5000881A

## DESCRIPTION:

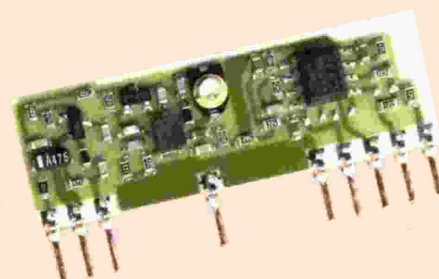
ASK receiver based on Super Regenerative principle, manufactured in thick film technology on ceramic substrate.

## HIGHLIGHTS:

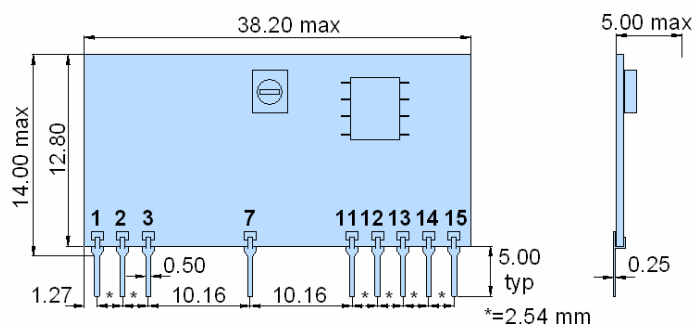
Developed according to I-ETS 300 220.  
Typical supply current 0.550 mA.

## APPLICATIONS:

Battery applications, ideal for on-off switched applications to minimize battery consumption.



## MECHANICAL CHARACTERISTICS



### Pin functions

- 1 = + 3 Vdc
- 2 = GND
- 3 = RF Input (50 Ω)
- 7 = GND
- 11 = GND
- 12 = + 3 Vdc
- 13 = T.P. (Not used)
- 14 = TTL Output
- 15 = + 3 Vdc

## ABS. MAX. RATINGS

Power Supply , Vcc, pin 1, 12, 15:	+ 6 Volt
Radio Frequency Input, pin 3:	+ 10 dBm
Output pins voltage with respect to GND:	+ Vcc
Storage Temperature:	- 40 ÷ + 100 °C
Operating Temperature:	- 20 ÷ + 70 °C

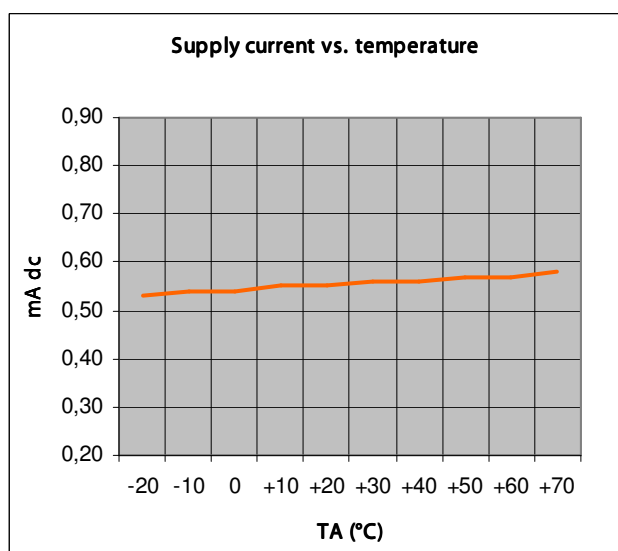
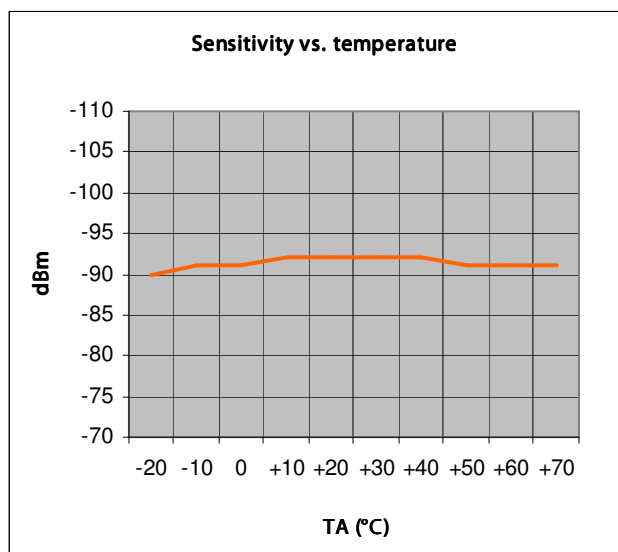
## ELECTRICAL CHARACTERISTICS AT THE TEMPERATURE OF + 25 °C

Parameter	Min.	Typ.	Max.	Unit	Notes
Supply Voltage(Vcc)	2.6	3.0	3.4	Volt	
Current Supply	-	0.55	-	mA	
Receiver Frequency	433.42	433.92	434.42	MHz	Note 1
Sensitivity	-	- 94	-	dBm	Note 2
RF Bandwidth -3dB	-	±2.0	-	MHz	
Antenna Spurious RF Emission	-	-	-57	dBm	
Baud Rate	-	-	4800	Baud	
Start-up Time	-	-	370	ms	Note 3
Settling Time	-	-	10	ms	Note 4
Logic Low	0	0.02	0.05	Volt	
Logic High	2.6	2.8	-	Volt	
Output Impedance	-	10	-	Kohm	

## TYPICAL CHARACTERISTICS (\*)



RF  
WIRELESS



\*: All graphs must be considered as indicative typical results in accordance with temperature variation.

**Note 1:** At production stage it's possible to obtain frequencies between 220 and 440 MHz.

**Note 2:** AM modulation 100%, square wave, 1KHz frequency.

**Note 3:** Time by power-on to valid data reception.

**Note 4:** Time by activation after stand-by to valid data reception.

**Note 5:** All RF parameters measured with input (pin 3) connected to 50 Ohm impedance signal source or load.

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