



**OK1IF**  
**Jednoduché  
stavebnice  
TCVR, vhodné  
pro portabbling**





## Co je to Portabling?

- Vysílání z přírody (SOTA, QRP Challenge )
- Vysílání na dovolené

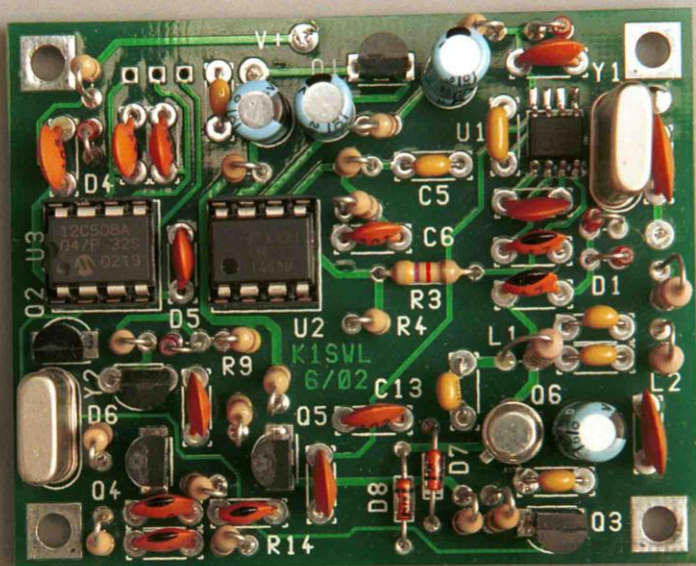
Základní podmínka – malý QRP TCVR bateriově napájený

Vše dělám pro radost

## Rock Mite = Rozkmit

- Nejjednodušší přímosměšující TCVR (dvoukmitočtový)
- Vestavěný Jambický klíč
- Zaručení poslechu tam, kde vysílá
- Až 500 mW výstupní výkon
- Bez cívek?
- Sestavení netrvá více jak 2.5 hodiny
- Profesionální PS

<http://www.smallwonderlabs.com/>



'Rock-mite' CW Transceiver Board kit

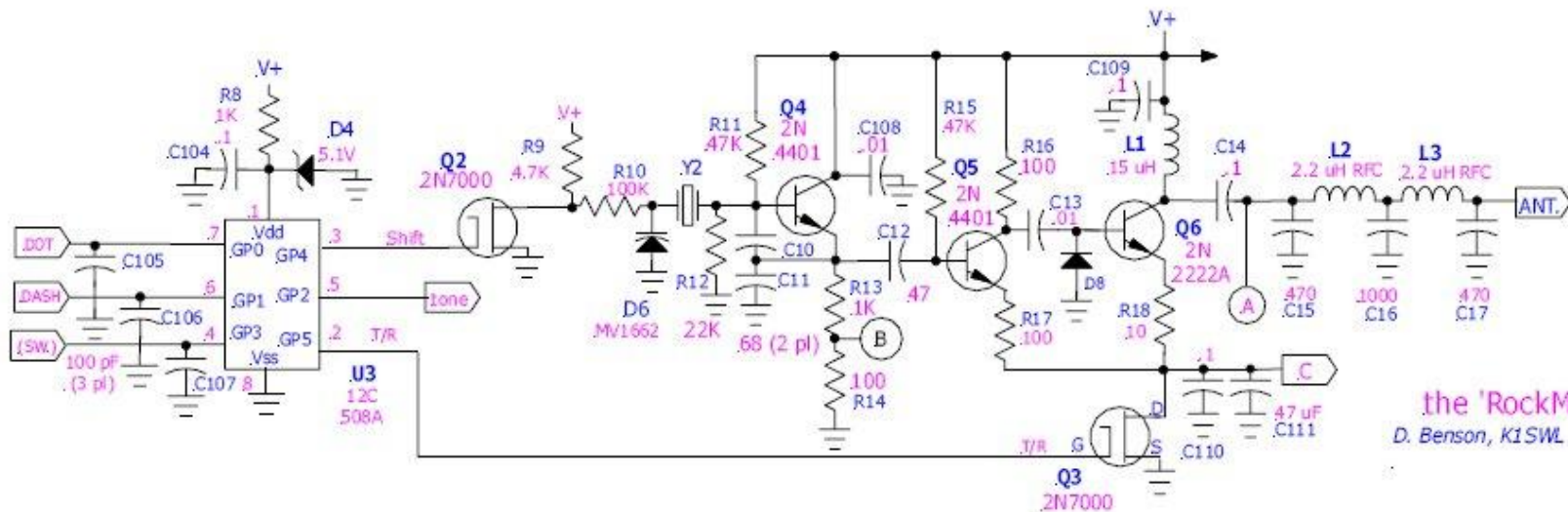
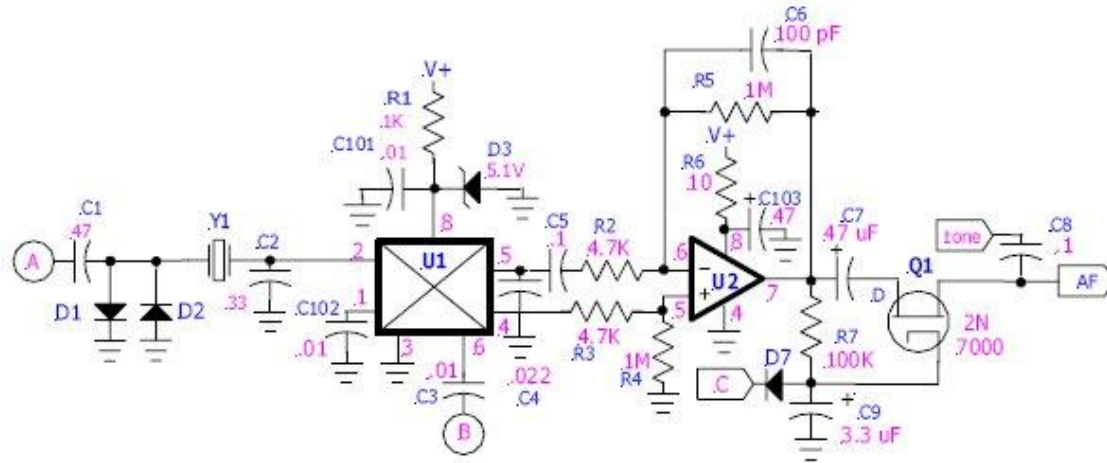
\$32 each.....

Band (choose one)

20M (14060 kHz)
30M (10106 kHz)
40M (7015 kHz)
40M (7030 kHz)
40M (7040 kHz)
80M (3560 kHz)



# Schéma

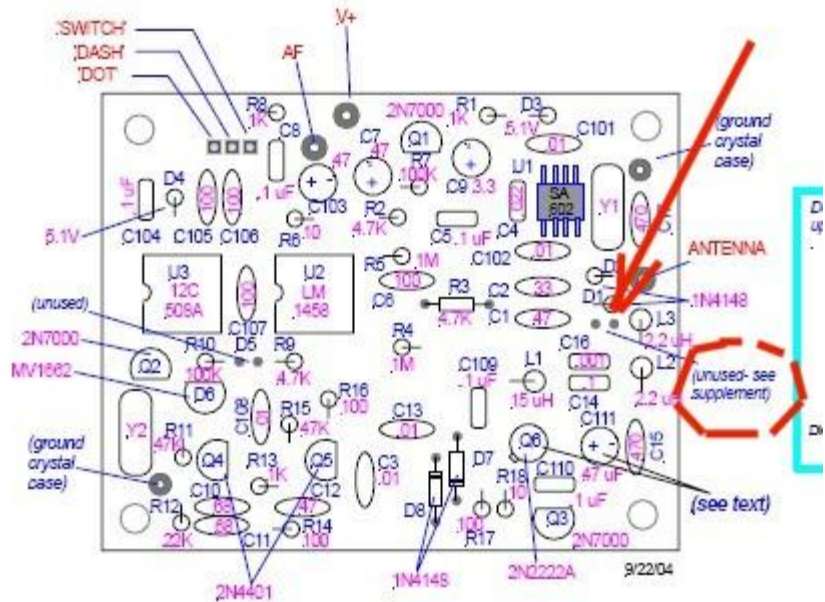
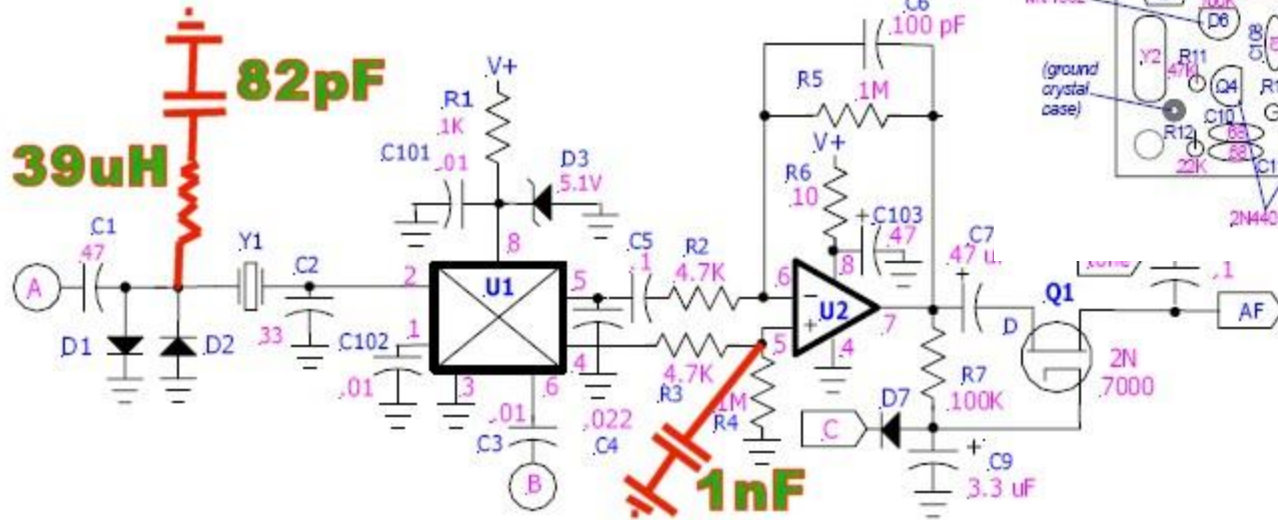


the 'RockMite-80'  
D. Benson, K1SWL 9/22/2004

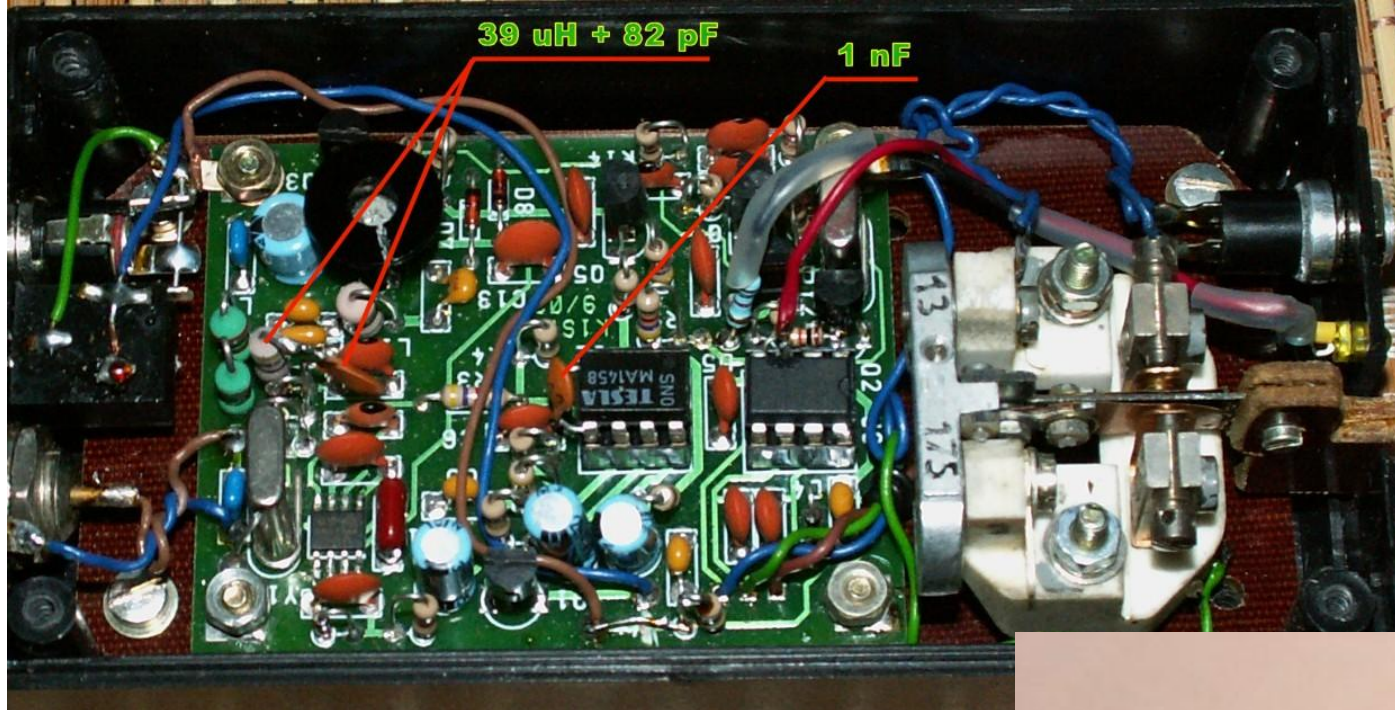
# Nevýhody

- Parazitní příjem signálů rozhlasových stanic (1440 KHz)

# Úpravy



## RM 80



- Dokáže rozeznat příjem na správném postranním pásmu
- Možná výměna klíčovacího obvodu za dokonalejší





## RM 80

- Zvuková ukázka – spojení s OK1FKD
- Zvuková ukázka ze závodu OK QRP 2007
- Možná výměna originálního klíč. obvodu

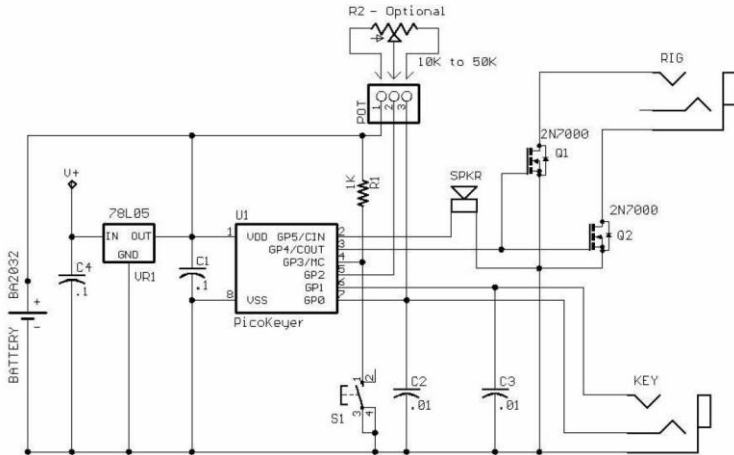
<http://www.hamgadgets.com/>

Prices per Quantity	
Up to 4	\$6.95
From 5 to 9	\$5.00
10 and more	\$4.50

### Features of the PicoKeyer-RM:

- Direct drop-in replacement for the Rock-Mite keyer chip
- Low voltage - from 2 to 5.5 V
- Low current - typical sleep current .005  $\mu$ A, under 1 mA when keying.
- Simple one-button "menu" interface
- Works with any dual lever ("squeeze") or single lever keyer paddle or straight key
- Setup and message entry using your paddle
- Speed adjustable from 5 to 60 WPM
- Variable pitch audio sidetone
- Adjustable weight
- Selectable Mode A or B operation
- Tune mode
- Beacon mode with adjustable 0 – 99 second delay
- Two message memories, 60 characters each can be chained together
- Memory "pause" allows manual insertion of QSO number, RST etc. into message
- Paddle switching - select left or right handed operation
- Memory and parameter settings retained with power off
- Auto straight key detect, both memories available with straight key

# Pico keyer KIT NOXAS



\$15.00



## Features of the Super PicoKeyer:

- Dual MOSFET keying circuit will key transmitters up to 60 V, positive or negative
- Low parts count - build a keyer with as few as two external components
- Simple one-button "menu" interface
- Four 60-character message memories can be chained together for longer messages
- Works with any dual lever iambic paddle, single lever keyer paddle or straight key
- Dot and dash memories, automatic timing and element spacing
- Setup and message entry using your paddle
- Auto straight key detect, all message memories available with straight key
- "Bug" mode allows automatic dots with manually formed dashes
- Speed adjustable from 5 to 60 WPM via menu OR optional speed potentiometer
- Dual-Set Speed allows quick QRS/QRQ and return to favorite speed
- Keyer kit PCB has pads for all connections (paddles, audio, power & keyline)
- Adjustable weight
- Variable pitch audio sidetone
- Curtis "A" or "B" or Ultimatic modes
- Variable letter/word spacing (Farnsworth)
- Tune mode with on/off carrier or automatic string if dits for easy tuneup
- Beacon mode with adjustable 0 – 99 second repeat delay
- MCW mode for sending audio Morse over voice radios
- Memory "pause" command allows manual insertion of RST etc. into message
- Auto-incrementing QSO / serial number can be embedded in memory messages, with or without leading zeros
- Paddle switching - select left or right handed operation
- Variable transmitter QSK delay compensation
- Memory and parameter settings retained with power off
- Low voltage - from as low as 2.5 to 5.5V
- Low current - typical sleep current .005  $\mu$ A, under 1 mA when keying.



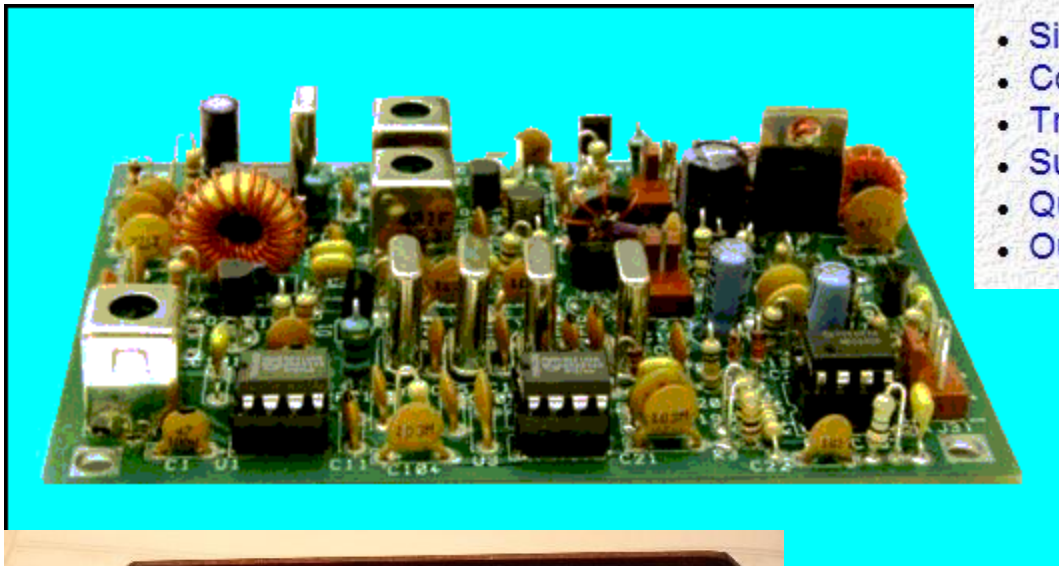
12.3.2008

Jednoduché stavebnice QRP



# SW80+ Téměř dokonalé QRP zařízení

Small wonder labs - <http://www.smallwonderlabs.com/>



- Single-board transceiver, 2.8 x 4.0" (7 x 10.1 cm)
- Commercial-quality board, masked and silkscreened
- True VFO: 35-40 kHz coverage
- Superheterodyne design, with crystal filtering
- Quiet solid-state T-R switching (QSK)
- Output Power Adjustable- 2.5W max.



12.3.2008

Jednoduché stavebnice QRP





# SW80+

SW+ Series

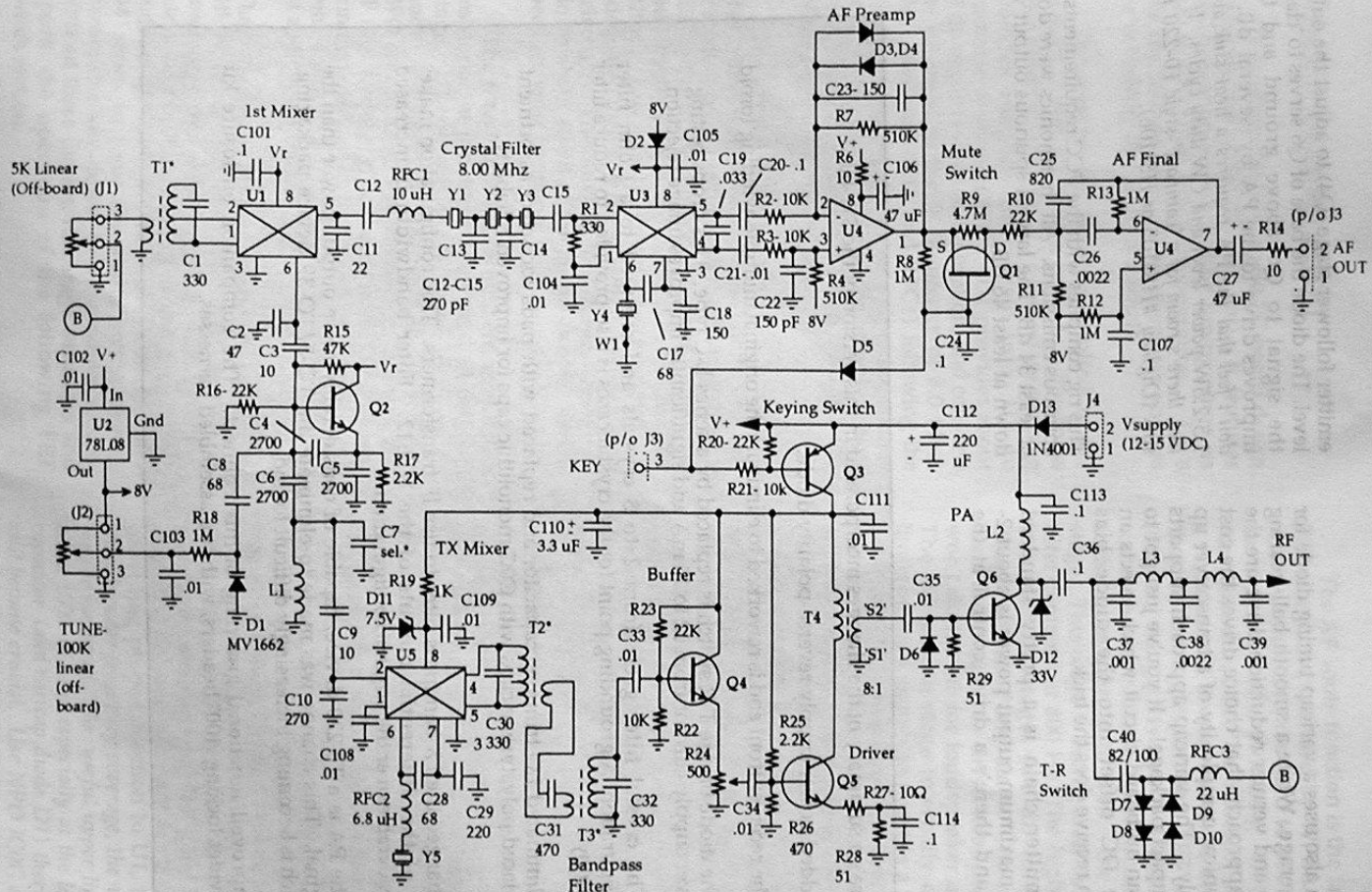
SW-20+/30+/40+/80+ @ \$60 ea. = \_\_\_\_\_

Band (choose one)





# SW80+



The "SW-80+" Transceiver

SMALL WONDER LABS™  
5/6/98

\* T1-T3  
C-internal not shown,  
leave intact.

Small Wonder Labs™ "SW-80+" Transceiver Kit May 6, 1998

© 1998

8

## SW80+

- Zvuková ukázka 1
- Zvuková ukázka ze závodu





# ATS3B – FT1000 chudého QRP amatéra?

## Specifications:

Frequency coverage: 80/40/30/20/17/15 meter bands

Receiver MDS, 0.2  $\mu$ V

Small signal bandwidth 500 Hz

Audio band pass filter centered at 600 Hz

Receive current, no signal 35 ma.

50/100 Hz tuning steps

RIT/XIT tuning modes

Transmit power output: 2.5 watts at 9V, 4.5 watts at 12 V

CW shaping, 2 ms rise and fall time

Spurs: -45 dBc or less

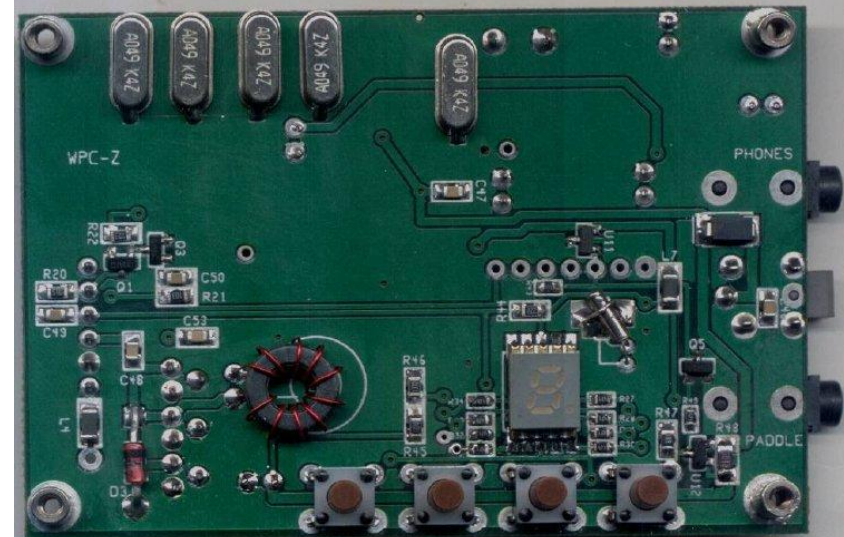
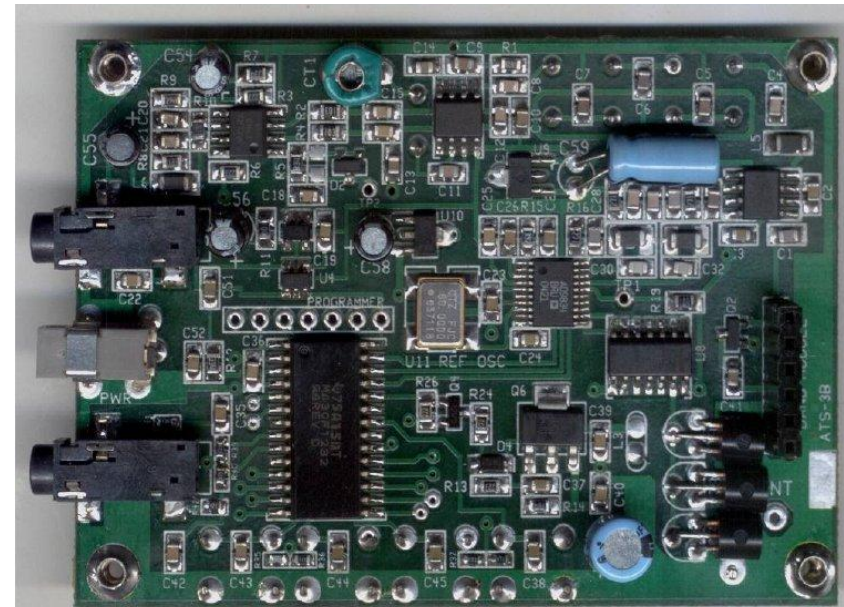
Transmit current: 460 ma at 9 V, 610 ma at 12 V

PA over current detection at 820 ma

5 to 35 wpm lmbic keyer with 3 message memories

Supply voltage: 5.5 volts minimum, 12 volts maximum

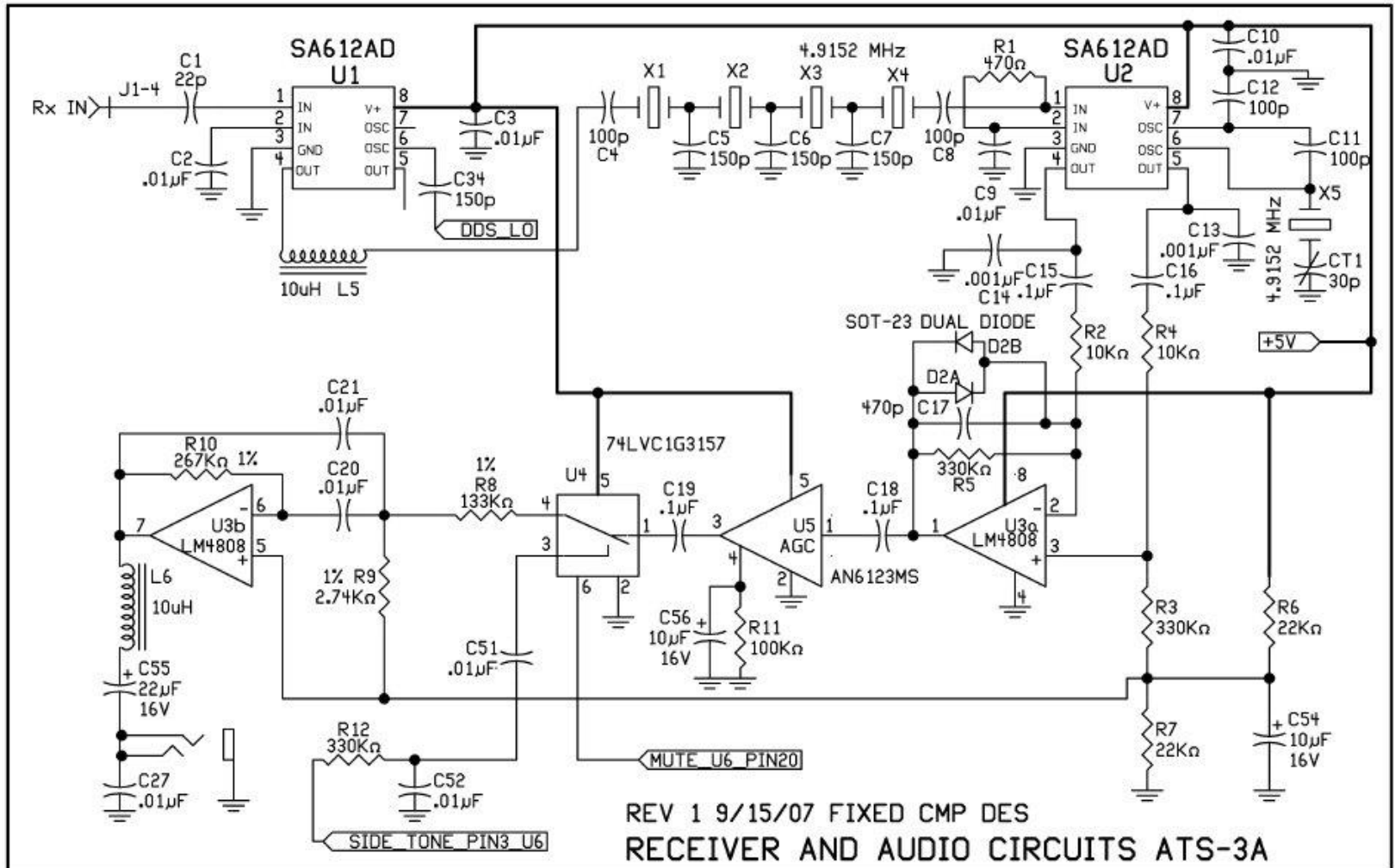
Board and one filter module, no case 1.1 oz.



# ATS3B RX

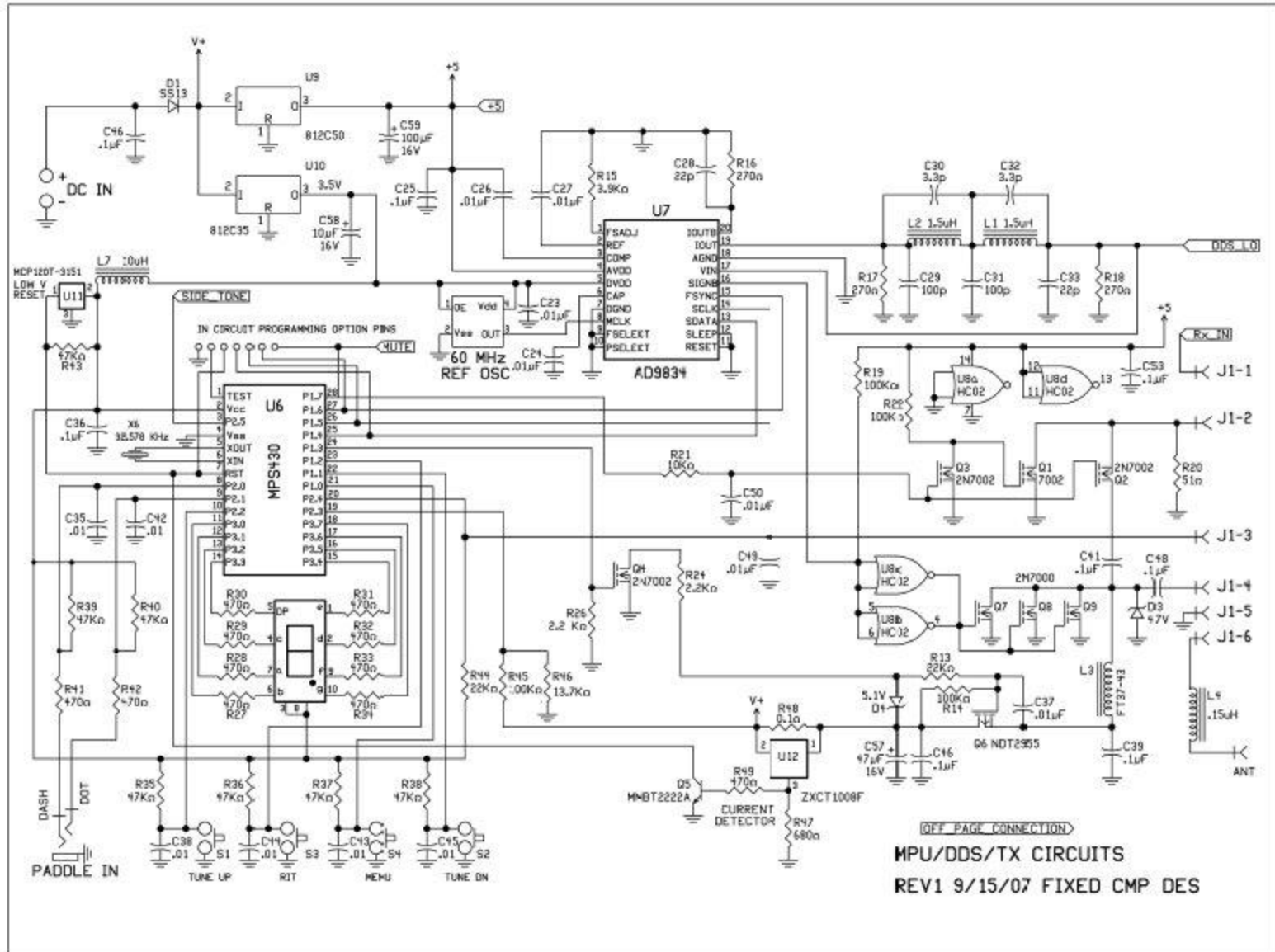
## Schematics

Receiver section schematic;





# ATS3B – DDS a TX



# ATS3B

<http://www.smallwonderlabs.com/>

200 USD kit

## AN6123MS

Speech network IC with ALC

### ■ Overview

The AN6123MS is an ALC IC for level control of audio signal (300 Hz to 3 kHz).

Adopting a mini 5-pin package, mounting on a small area is possible.

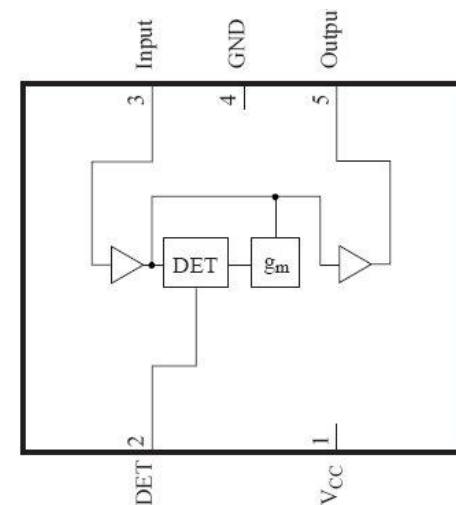
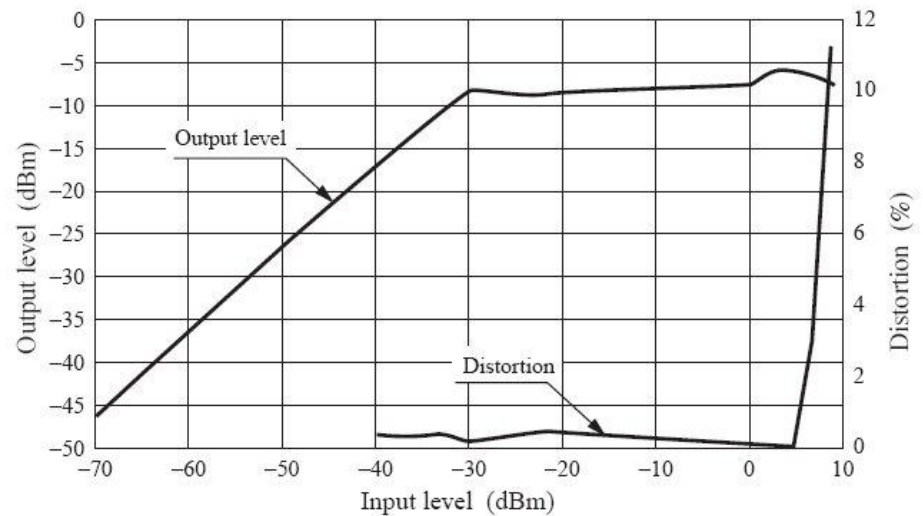
### ■ Features

- Wide supply voltage operation range of  $V_{CC} = 2.4\text{ V}$  to  $6.0\text{ V}$
- Small current consumption of  $I_{CC} = 500\text{ }\mu\text{A}$
- Reduction of a bad effect by the external noise thanks to a package for a rear side mounting.

### ■ Applications

- Cordless telephone, PDC, PHS telephone

Graph 1. I/O characteristics and distortion (when  $C = 10\text{ }\mu\text{F}$ )





## ATS3B

- Zvuková ukázka DX
- Zvuková ukázka S&P



**ATS3B – Vítěz letošního OK  
QRP závodu – OK1DWF**

