

# UTC 7642      LINEAR INTEGRATED CIRCUIT

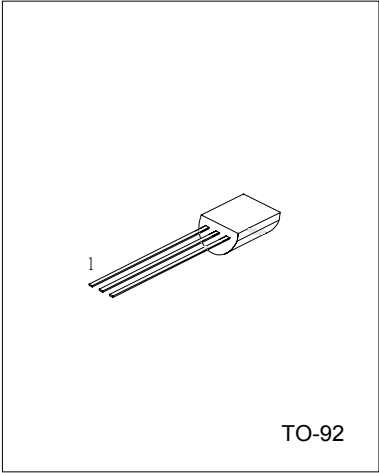
## ONE CHIP AM RADIO CIRCUIT

### DESCRIPTION

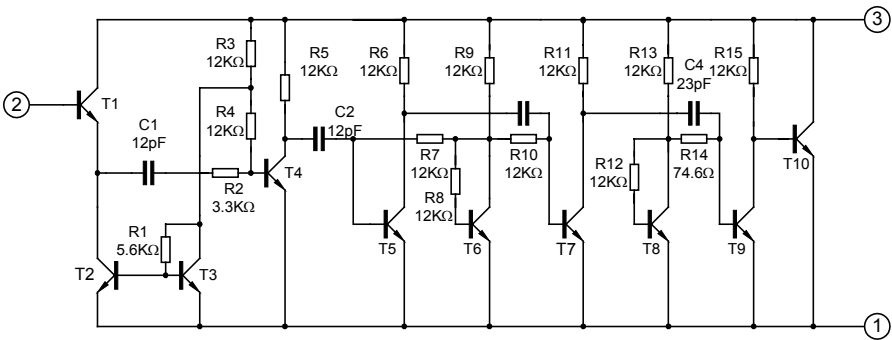
UTC 7642 is suitable for low voltage portable Radio, cassette system and other wireless AM system. The package of UTC7642 is TO-92.

### FEATURE

- \*Low operating voltage: Down to  $V_{CC}=1.3V$
- \*Low Quiescent Current:  $I_{CCO}=0.2mA$
- \*Low external component required.



### EQUIVALENT CIRCUIT



### ABSOLUTE MAXIMUM RATINGS (Tested at $T_a=25^{\circ}C$ , unless otherwise specified)

PARAMETERS	SYMBOLS	MIN.	MAX.	UNIT
Supply Voltage	$V_{CC}$		6	V
Operating Temperature	$T_{opr}$	-10	60	$^{\circ}C$
Storage temperature	$T_{STG}$	-55	150	$^{\circ}C$

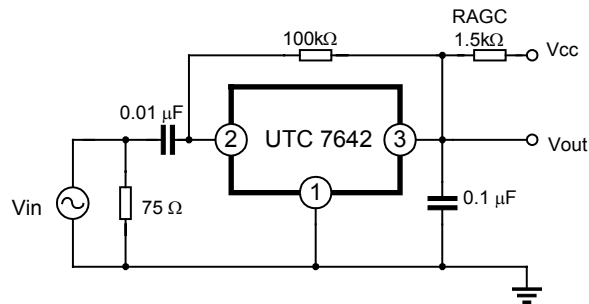
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## ELECTRICAL CHARACTERISTICS

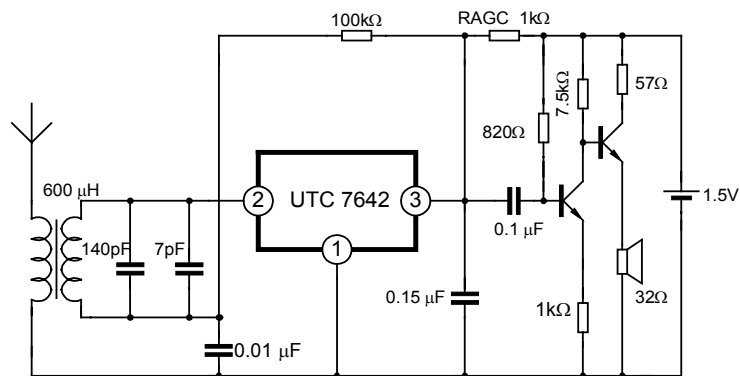
(Tested at  $T_a=25^{\circ}\text{C}$ ,  $V_{CC}=1.3\text{V}$ ,  $f_m=1\text{KHZ}$ ,  $f_o=1\text{MHZ}$ ,  $\text{MOD}=30\%$ , unless other specified)

PARAMETERS	SYMBOLS	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Supply Voltage	$V_{CC}$		1.2	1.3	1.6	V
Quiescent Current	$I_{CCQ}$	$V_I=0$	0.14	0.20	0.30	mA
Input Resistance	$R_I$		-	3	-	$\text{M}\Omega$
Maximum Sensitivity	SM	$V_{OD}=3\text{mV}$	-	600	-	$\mu\text{V}$
Detector Output Voltage	$V_{OD}$	$V_I=10\text{mV}$	5	15	30	mV
The Range of AGC	$\Delta A$		-	30	-	dB

## TEST CIRCUIT



## APPLICATION CIRCUIT



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