

TA7642

LINEAR INTEGRATED CIRCUIT

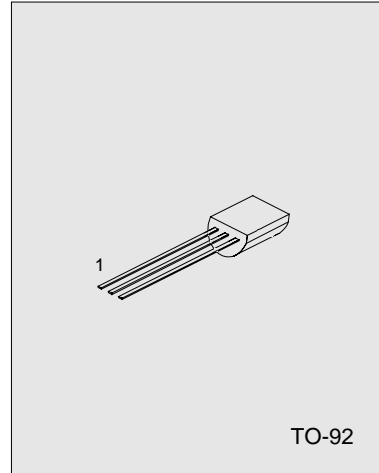
ONE CHIP AM RADIO CIRCUIT

DESCRIPTION

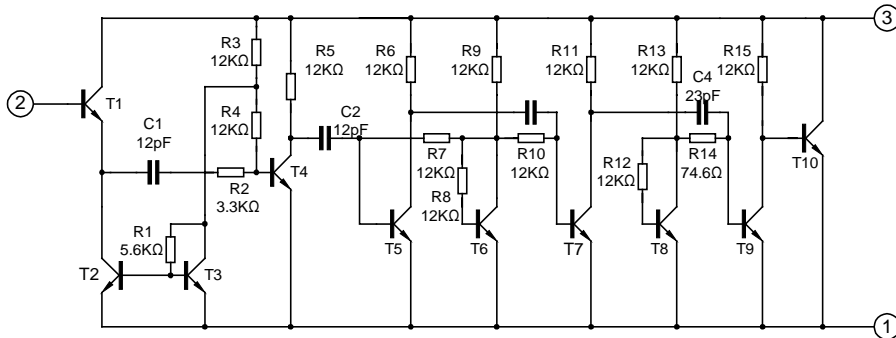
The TA7642 is suitable for low voltage portable Radio, cassette system and other wireless AM system. The package of UTC7642 is TO-92.

FEATURES

- *Low operating voltage: Down to $V_{CC}=1.3V$
- *Low Quiescent Current: $I_{CC0}=0.2mA$
- *Low external component required.



EQUIVALENT CIRCUIT



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

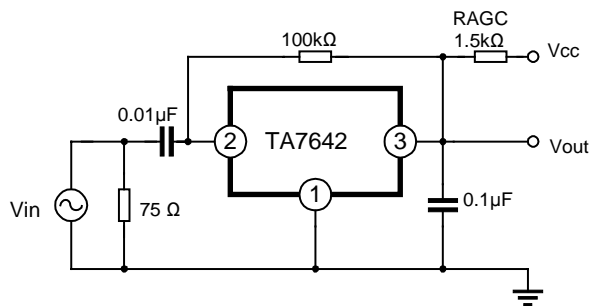
Parameters	Symbols	Min.	Max.	Unit
Supply Voltage	V_{CC}		6	V
Operating Temperature	T_{opr}	-10	60	$^{\circ}C$
Storage temperature	T_{STG}	-55	150	$^{\circ}C$

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	—	$M\Omega$
Maximum sensitivity	SM	$V_{OD}=3\text{mV}$	—	600	—	μV
Detector Output Voltage	V_{OD}	$V_I=10\text{mV}$	5	15	30	mV
The Range of AGC	ΔA		—	30	—	dB

TEST CIRCUIT



APPLICATION CIRCUIT

