

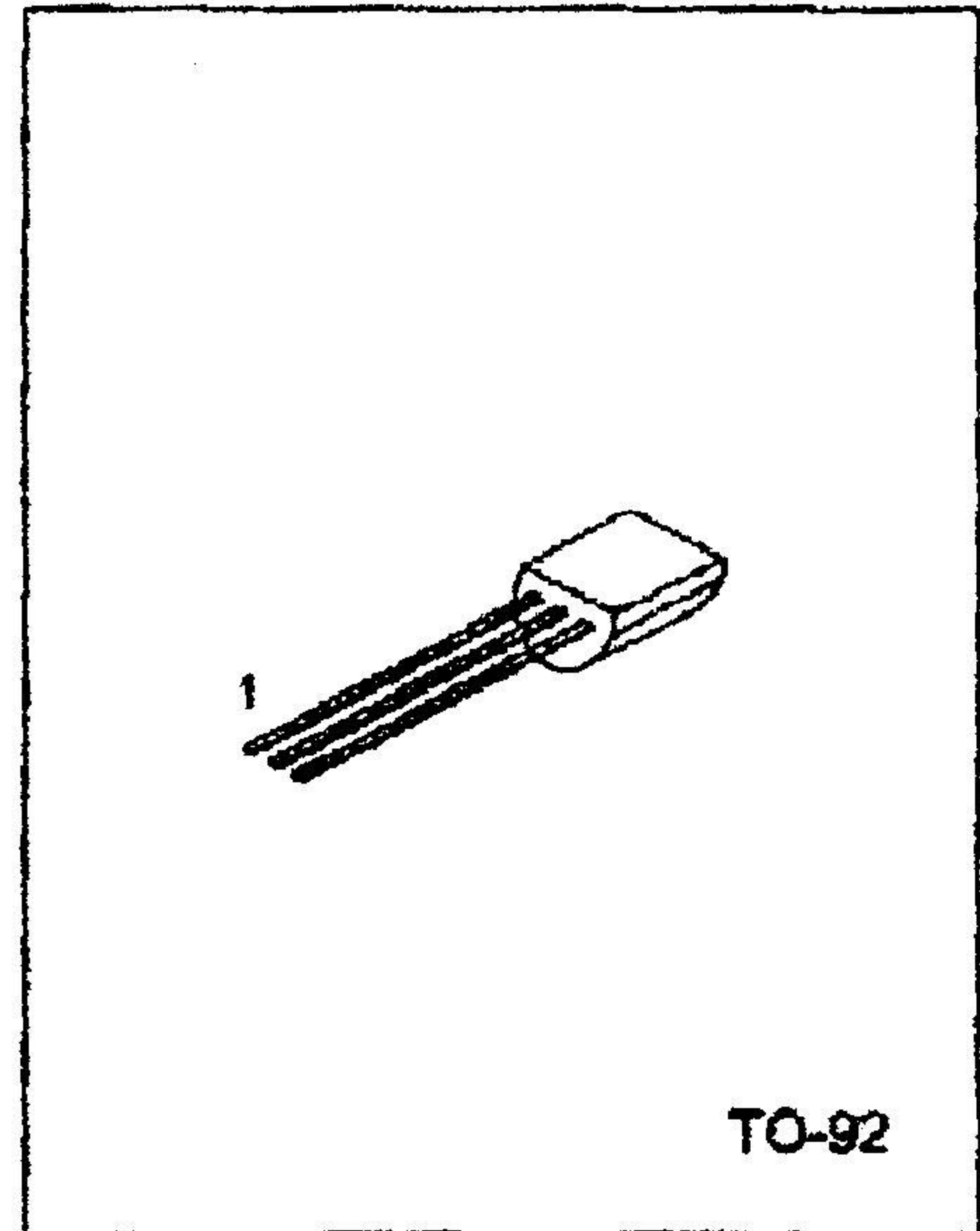
ONE CHIP AM RADIO CIRCUIT

DESCRIPTION

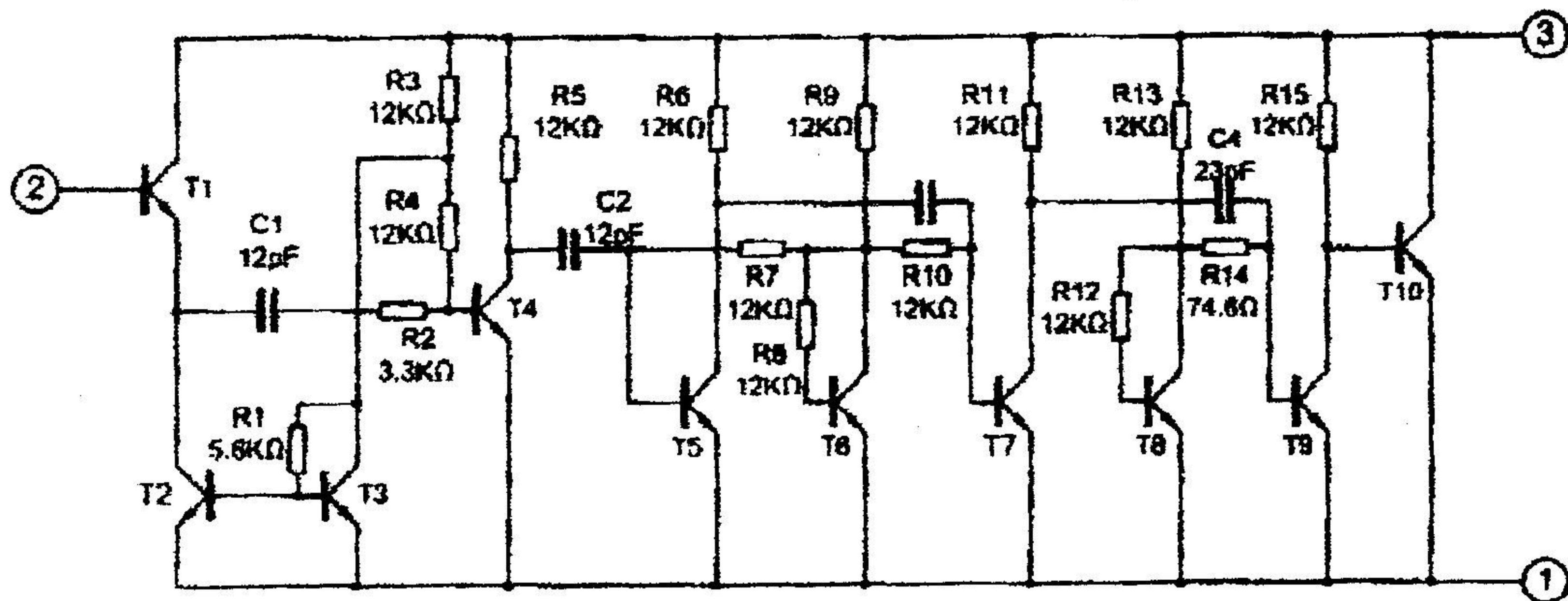
The TA7642 is suitable for low voltage portable Radio, cassette system and other wireless AM system. The package of UTC7642 is TO-92.

FEATURES

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



EQUIVALENT CIRCUIT



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

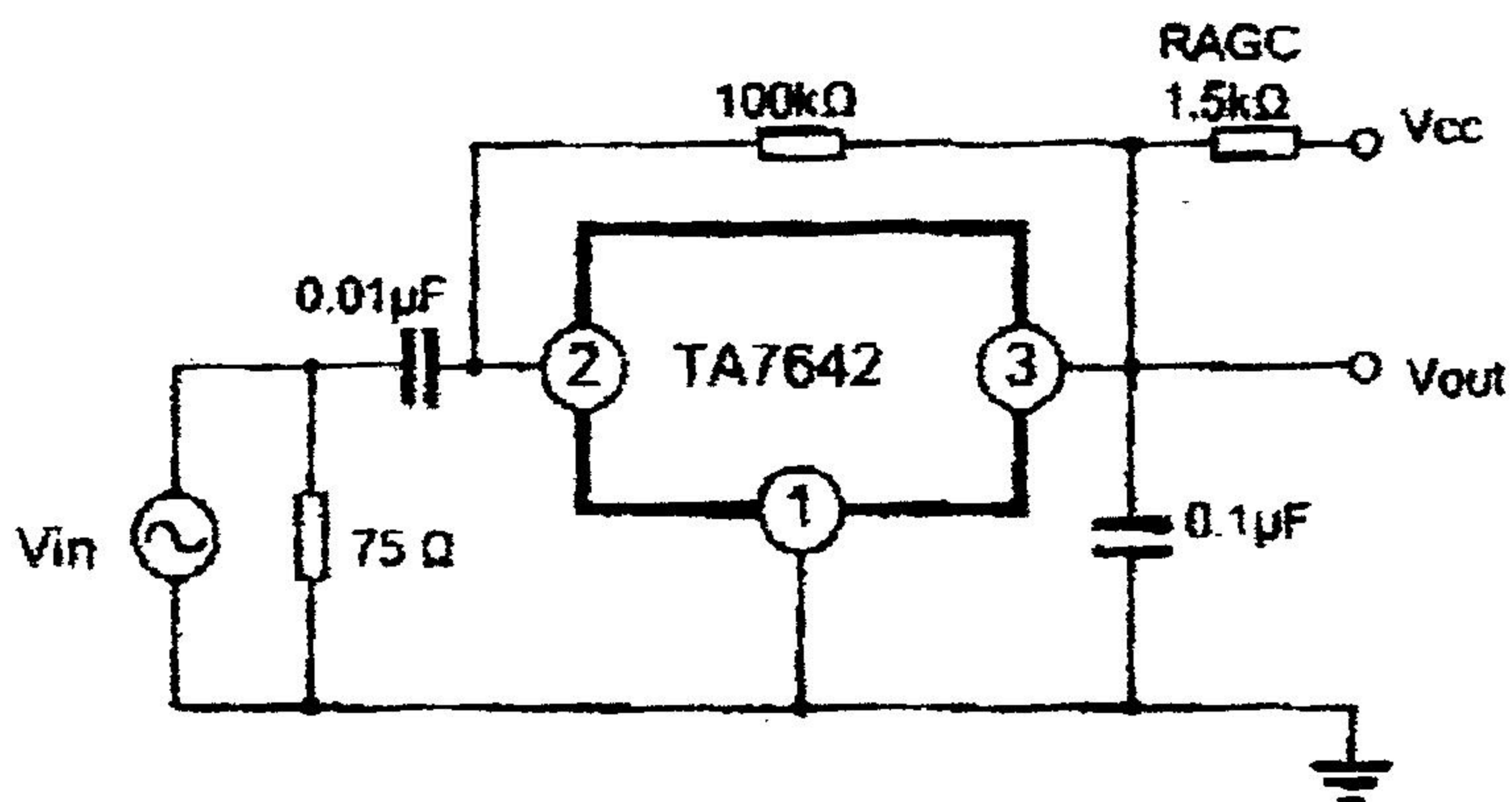
Parameters	Symbols	Min.	Max.	Unit
Supply Voltage	V_{CC}		6	V
Operating Temperature	T_{opr}	-10	60	$^{\circ}C$
Storage temperature	T_{STG}	-55	150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS

(Tested at $T_a=25^\circ\text{C}$, $V_{cc}=1.3\text{V}$, $f_m=1\text{kHz}$, $f_0=1\text{MHz}$, $\text{MOD}=30\%$, 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 Ω
Maximum sensitivity	SM	$V_{00}=3\text{mV}$	—	600	—	μV
Detector Output Voltage	V_{00}	$V_i=10\text{mV}$	5	15	30	mV
The Range of AGC	ΔA		—	30	—	dB

TEST CIRCUIT



APPLICATION CIRCUIT

