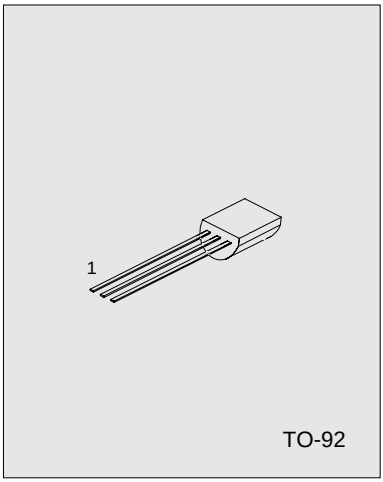
ONE CHIP AM RADIO CIRCUIT



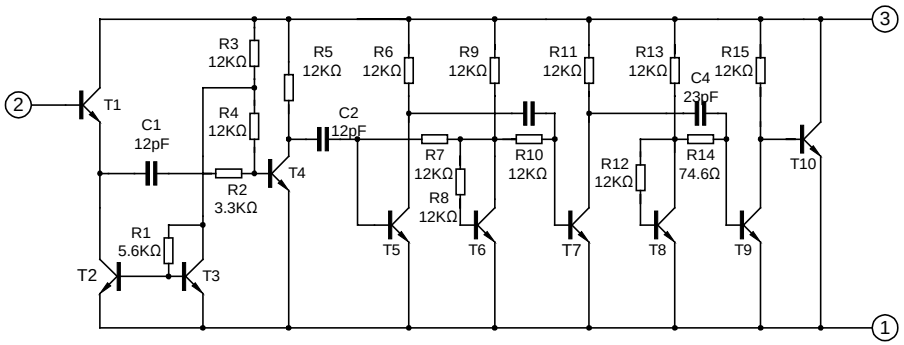
DESCRIPTION

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_{CCO}=0.2mA
*Low external component required.

EQUIVALENT CIRCUIT



ABSOLUTE MAXIMUM RATINGS (Tested at Ta=25°C,unless otherwise specified)

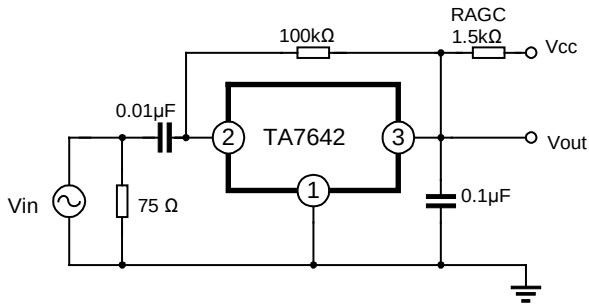
Parameters	Symbols	Min.	Max.	Unit
Supply Voltage	V_{CC}		6	V
Operating Temperature	Topr	-10	60	°C
Storage temperature	T_{STG}	-55	150	°C

ELECTRICAL CHARACTERISTICS

(Tested at Ta=25°C,V_{CC}=1.3V,fm=1kHz,f_O=1MHz,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	—	MΩ
Maximum sensitivity	SM	V_{OD}=3mV	—	600	—	μV
Detector Output Voltage	V_{OD}	V_I=10mV	5	15	30	mV
The Range of AGC	ΔA		—	30	—	dB

TEST CIRCUIT



APPLICATION CIRCUIT