



7642

LINEAR INTEGRATED CIRCUIT

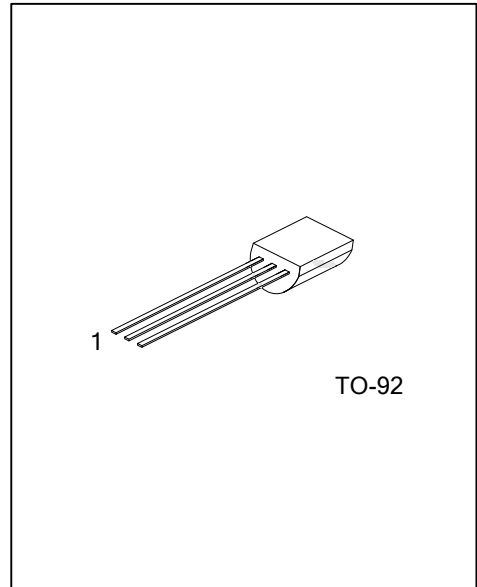
ONE CHIP AM RADIO CIRCUIT

DESCRIPTION

UTC **7642** is suitable for low voltage portable Radio, cassette system and other wireless AM system.

FEATURES

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



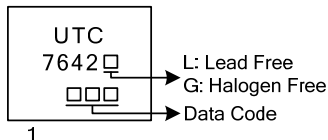
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
7642L-T92-B	7642G-T92-B	TO-92	G	I	O	Tape Box
7642L-T92-K	7642G-T92-K	TO-92	G	I	O	Bulk

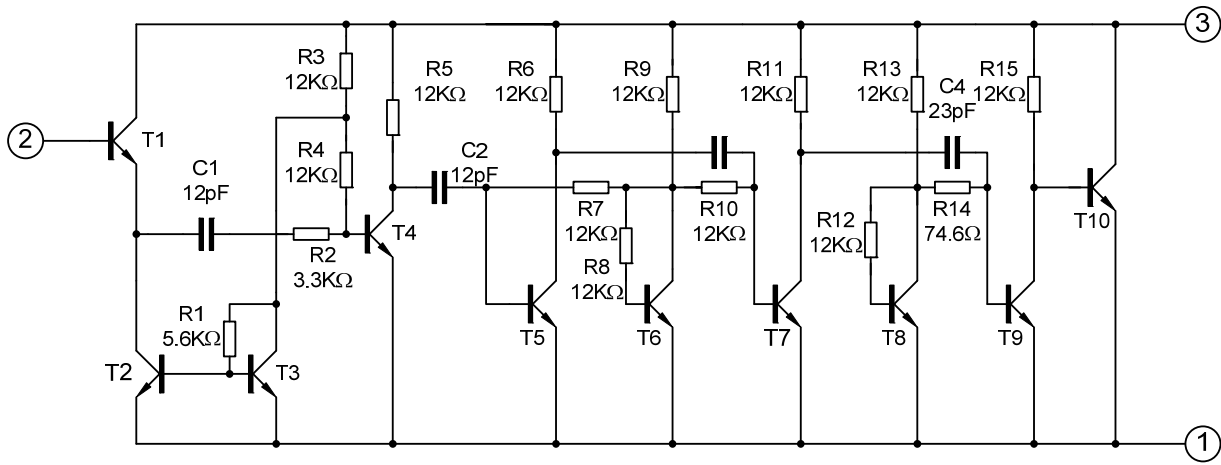
Note: Pin Assignment: G: GND I: V_{IN} O: V_{OUT}

<p>7642L-T92-B</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) B: Tape Box, K: Bulk</p> <p>(2) T92: TO-92</p> <p>(3) L: Lead Free, G: Halogen Free and Lead Free</p>
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MARKING



■ EQUIVALENT CIRCUIT



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS		UNIT
		MIN	MAX	
Supply Voltage	V_{CC}		6	V
Operating Temperature	T_{OPR}	-10	60	$^\circ\text{C}$
Storage temperature	T_{STG}	-55	150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

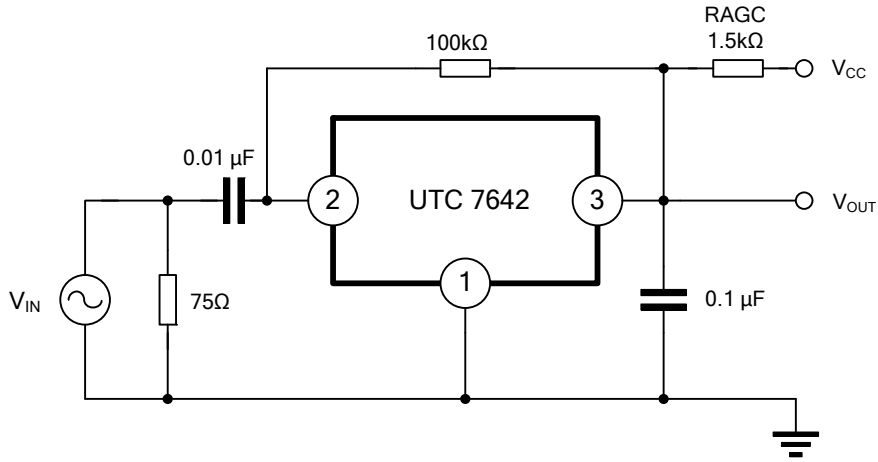
■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	62.5	$^\circ\text{C/W}$
Junction to Case	θ_{JC}	0.4	$^\circ\text{C/W}$

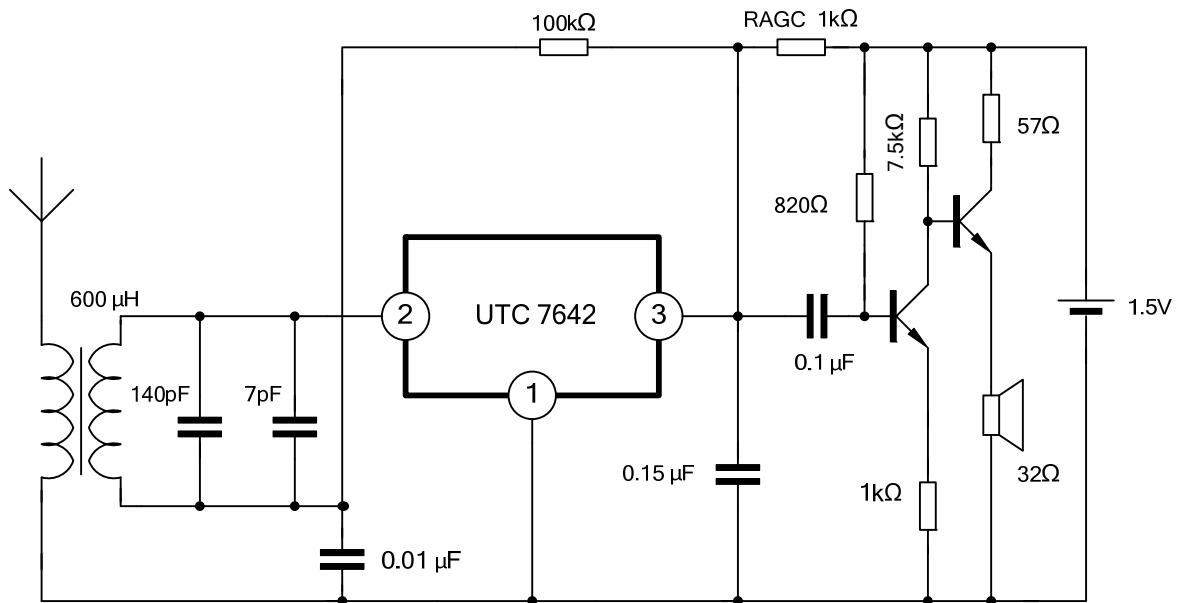
■ ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	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	S_M	$V_{OD}=3\text{mV}$	-	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



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