

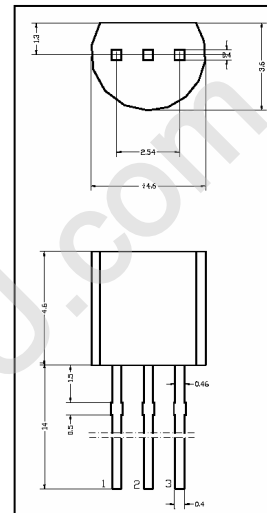


ONE CHIP AM RADIO CIRCUIT CD7642CP

DESCRIPTION

The CD7642CS is suitable for low voltage portable Radio, cassette system and other wireless AM system. The package of CD7642CS is TO-92.

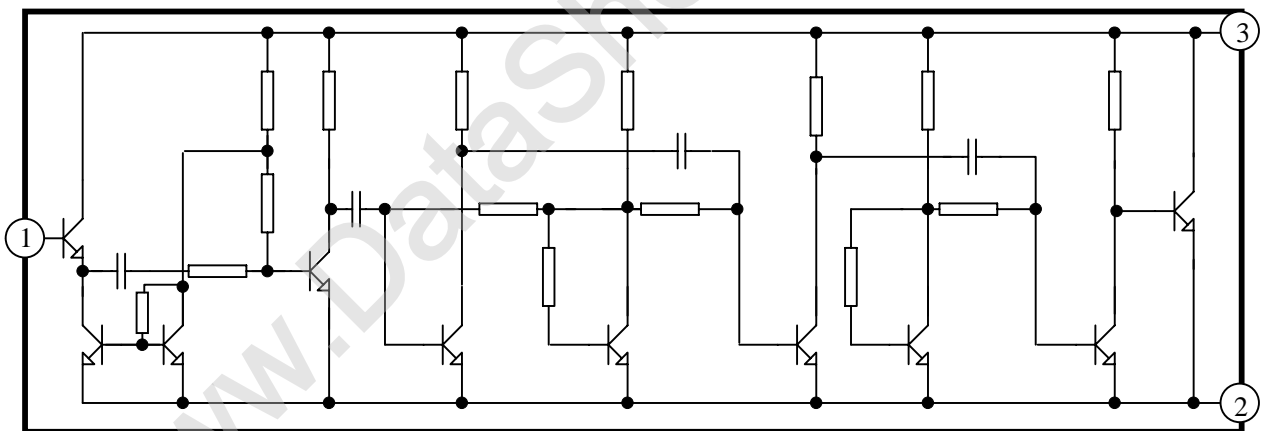
Outline Drawing



FEATURE

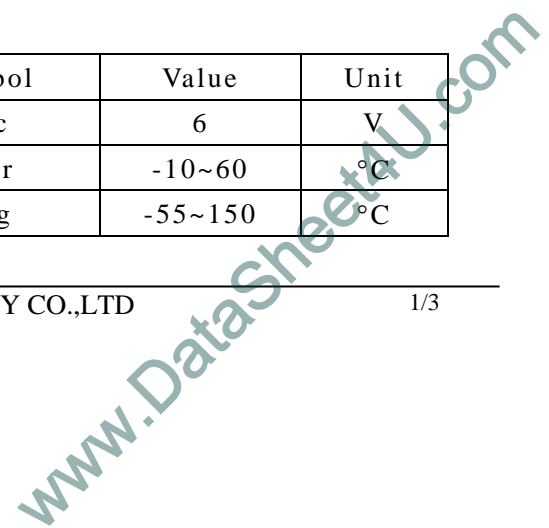
- Low operating voltage: Down to $V_{CC}=1.3V$
- Low Quiescent Current: $I_{CC0}=0.2mA$
- Low external component required.

EQUIVALENT CIRCUIT



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	6	V
Operating Temperature	T_{opr}	-10~60	°C
Storage Temperature	T_{stg}	-55~150	°C

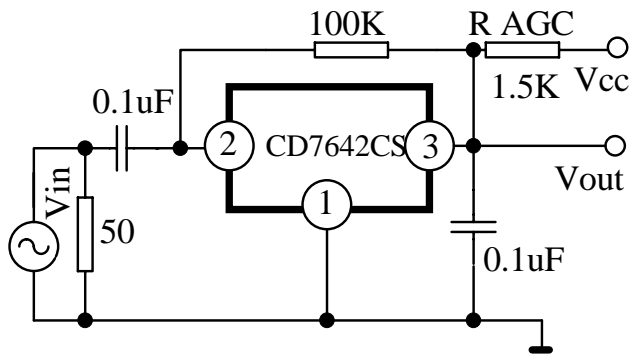


ELECTRICAL CHARACTERISTICS

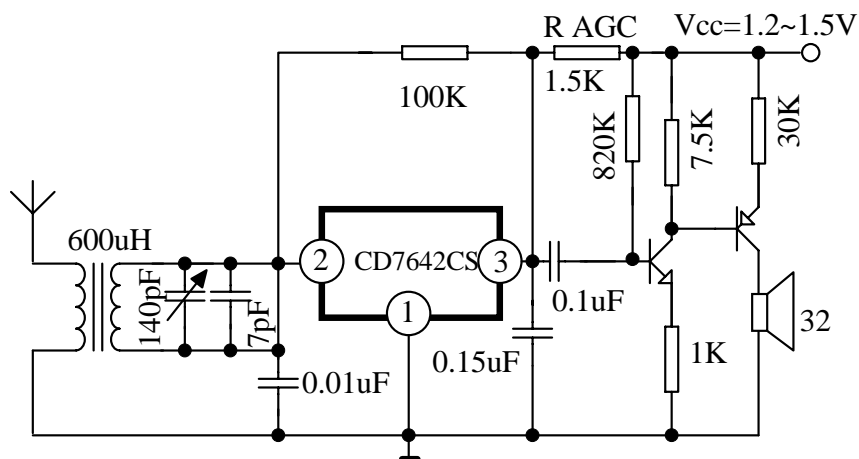
(Unless otherwise specified: $T_a=25^{\circ}\text{C}$, $V_{cc}=1.3\text{V}$, $f_m=1\text{kHz}$, $f_o=1\text{MHz}$, $\text{MOD}=30\%$)

Characteristics	Test conditions	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage		V_{cc}	1.2	1.3	1.6	V
Quiescent Current	$V_i=0$	I_{cco}	0.14	0.2	0.3	mA
Input Resistance		R_i		3		$\text{M}\Omega$
Maximum Sensitivity	$V_{OD}=3\text{mV}$	SM		600		μV
Detector Output Voltage	$V_i=10\text{mV}$	V_{OD}	5	15	30	mV
The Range of AGC		ΔA		30		dB

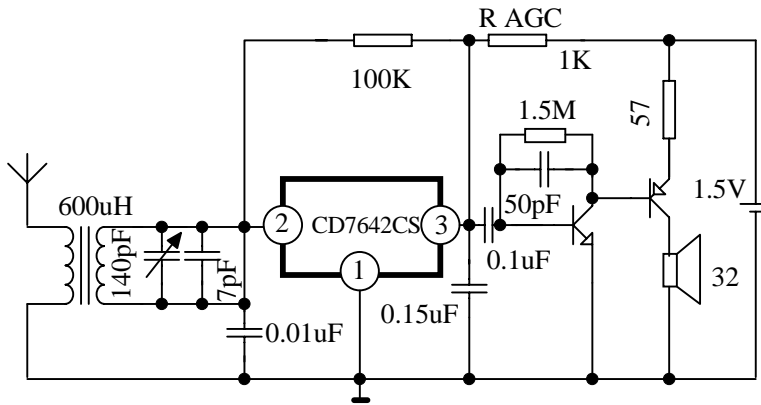
TEST CIRCUIT



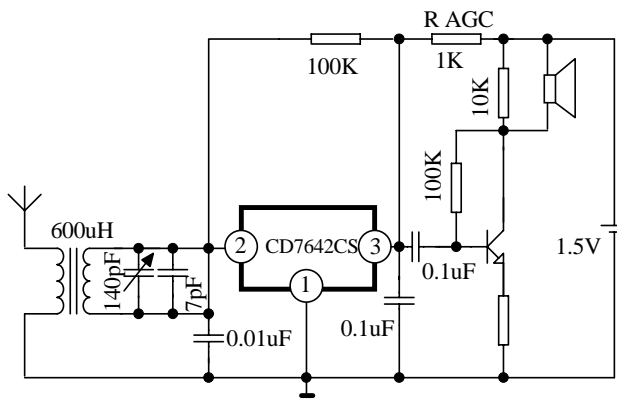
APPLICATION CIRCUIT



Circuit 1



Circuit 2



Circuit 3

CHARACTERISTIC CURVE

