

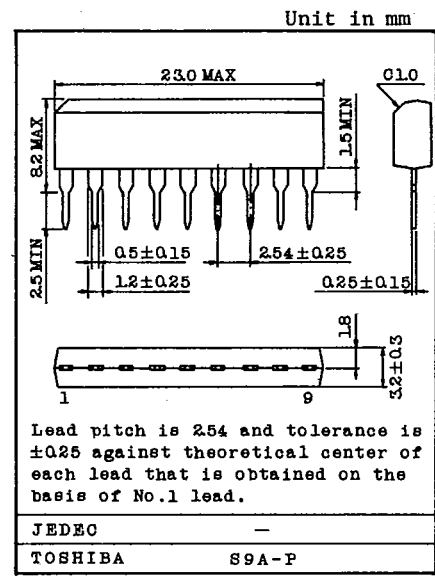
TA7333P

T-77-11

RADIO CONTROL TRANSMITTER IC

The TA7333P is designed for a 1 chip transmitter IC including pulse generator, duty control mixer, carrier oscillator and RF power amplifier. This IC has 4 control modes by combination of 2 switches (SW_L and SW_R). A modulation frequency (pulse wave) is set arbitrarily by capacitance C₁ and resistance R₁. By combining TA7333P (Transmitter IC) and TA7657P (Receiver IC), a suitable radio control system of toy is able to be constituted.

- . Very Few External Parts
- . Wide Supply Voltage Range : V_{opr}=6 ~ 10V
Recommended VCC=9V



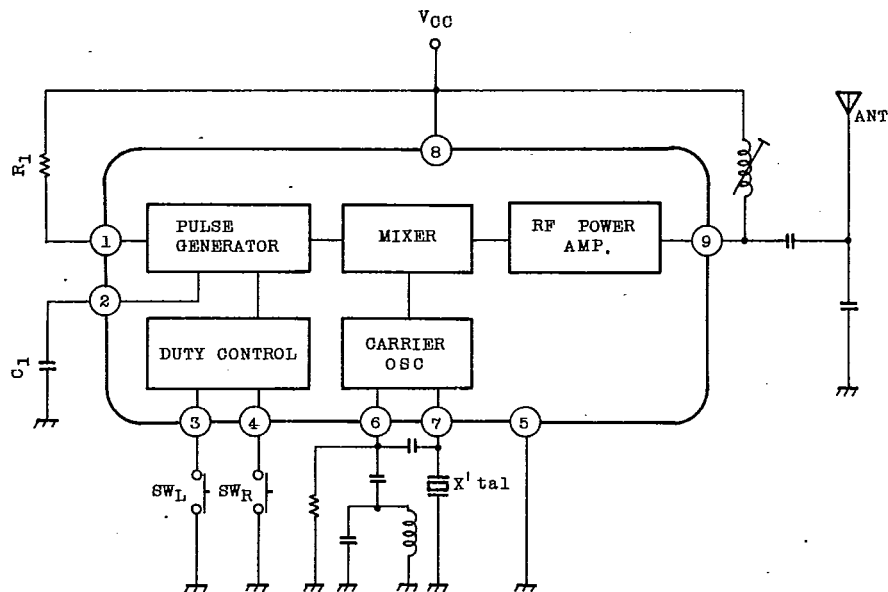
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	12	V
9 Pin Voltage	V ₉	18	V
9 Pin Allowable Load	R _L	300	Ω
Power Dissipation (Note)	P _D	600	mW
Operating Temperature	T _{opr}	-25 ~ 75	°C
Storage Temperature	T _{stg}	-55 ~ 150	°C

Note : Derated above Ta=25°C in the proportion of 4.8mW/°C.

TA7333P

BLOCK DIAGRAM



ELECTRICAL CHARACTERISTICS

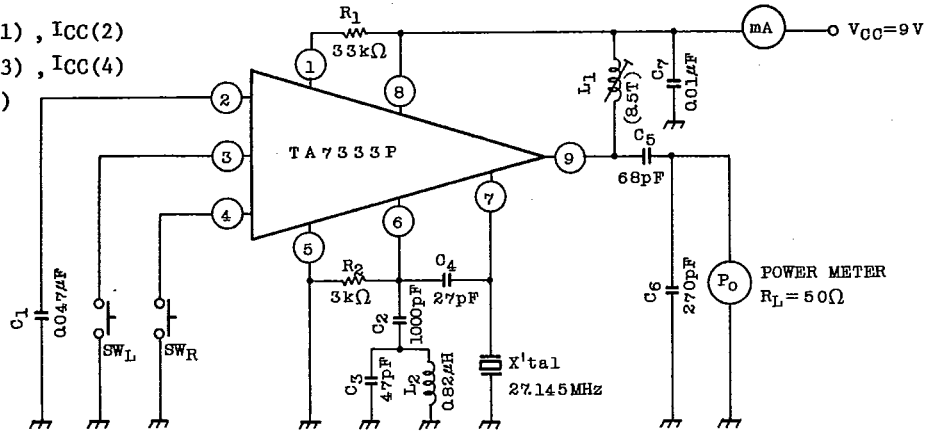
(Unless otherwise specified $V_{CC}=9V$, $f_{OSC}=27MHz$, $R_L=50\Omega$, $T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	$I_{CC}(1)$	1	-	-	18	21	mA
	$I_{CC}(2)$	1	SW _L ON	-	17	-	
	$I_{CC}(3)$	1	SW _R ON	-	14	-	
	$I_{CC}(4)$	1	SW _L , SW _R ON	-	16	-	
Transmitter Output Power	$P_o(1)$	1	-	15	20	-	mW
	$P_o(2)$	2	$f_{OSC}=40MHz$	-	17	-	
Modulation Frequency	$f_m(1)$	3	SW _L ON or SW _R ON	-	2	-	kHz
	$f_m(2)$	3	SW _L ON and SW _R ON	-	4	-	

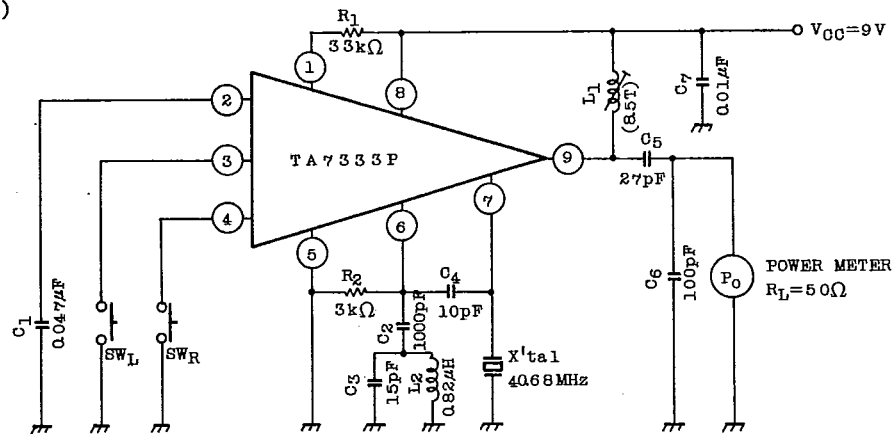
TA7333P

TEST CIRCUIT

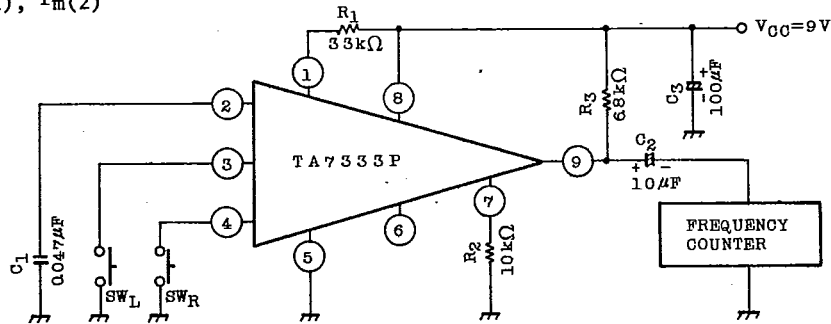
1. $I_{CC}(1)$, $I_{CC}(2)$
 $I_{CC}(3)$, $I_{CC}(4)$
 $P_o(1)$



2. $P_o(2)$



3. $f_m(1)$, $f_m(2)$

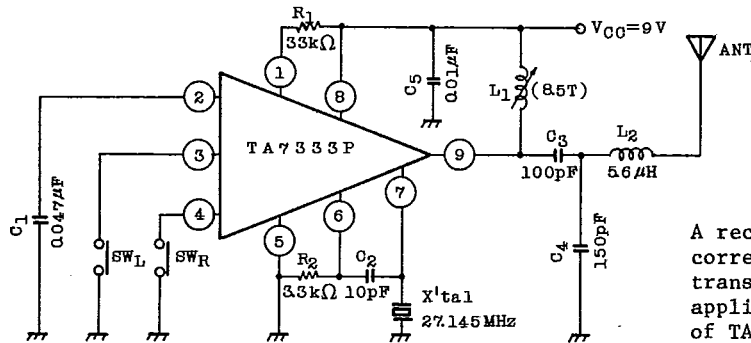


AUDIO LINEAR IC

TA7333P

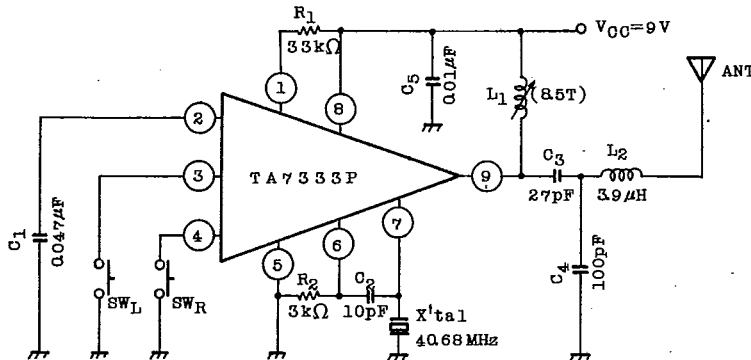
APPLICATION CIRCUIT

1. 27MHz 4 ACTION TRANSMITTER

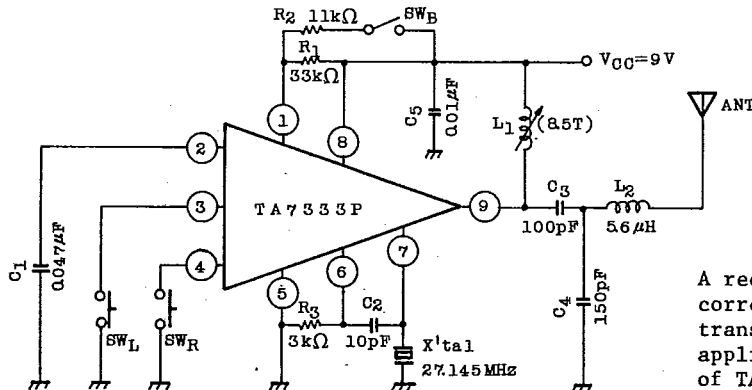


A receiver circuit corresponding to this transmitter is the application circuit 1 of TA7657P.

2. 40MHz 4 ACTION TRANSMITTER

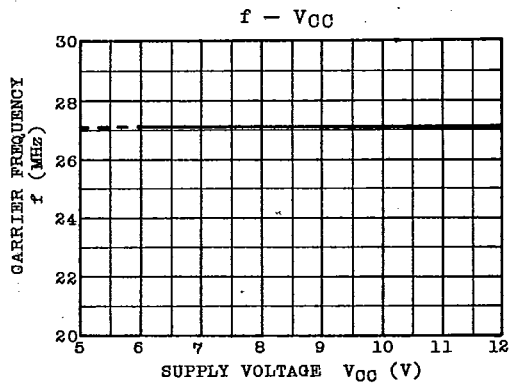
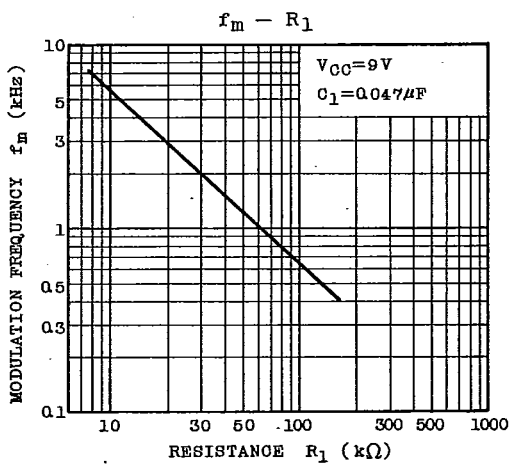
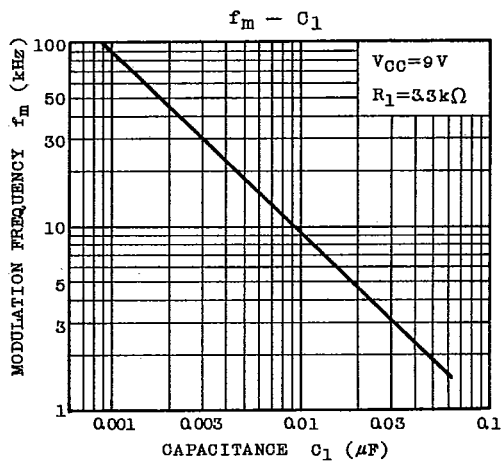
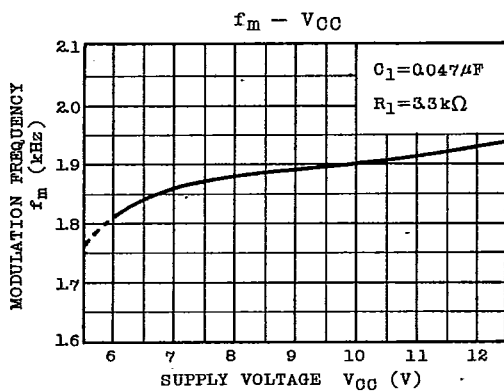
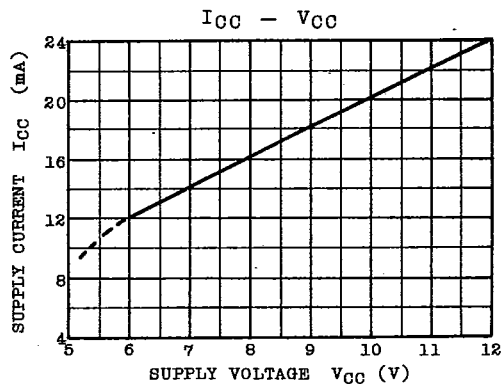
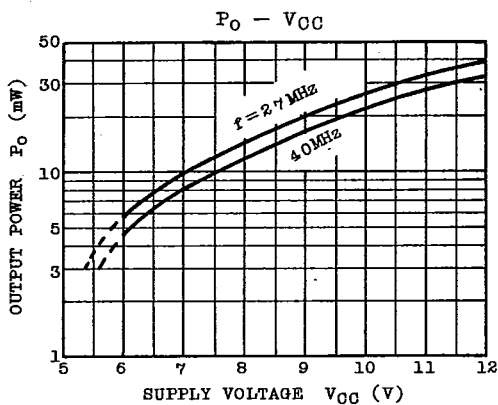


3. 27MHz 7 ACTION TRANSMITTER



A receiver circuit corresponding to this transmitter is the application circuit 2 of TA7657P.

TA7333P



AUDIO LINEAR IC