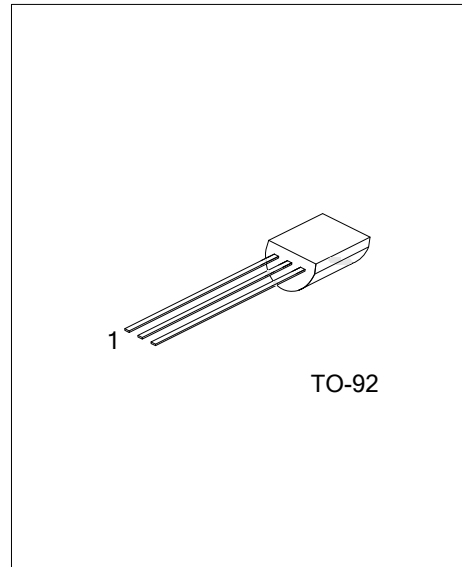




UM68TXX

CMOS IC

128 NOTES DUAL TONE MELODY GENERATOR PWM OUTPUT DIRECT TO BUZZER AND SPEAKER



DESCRIPTION

The UTC **UM68TXX** series are CMOS LSI designed for using in door bell, telephone and toy application. It is an on-chip ROM programmed for musical performance. Produced by CMOS technology, the device results in very low power consumption. Since the UTC **UM68TXX** series include oscillation circuits a compact melody module can be constructed with only a few additional components.

FEATURES

- * 128-Note Rom memory
- * 2.5V ~ 5V power supply and low power consumption
- * Dynamic speaker can be driven with external NPN transistor
- * 14 tempos available through mask setting
- * 15 beats available
- * 27 notes (including rest) available
- * OSC resistor hold mode
- * Power on reset: melody begins from the first note
- * Built in level hold mode
- * PWM output

ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UM68TxxL-T92-B	UM68TxxG-T92-B	TO-92	V _{SS}	V _{DD}	O/P	Tape Box
UM68TxxL-T92-R	UM68TxxG-T92-R	TO-92	V _{SS}	V _{DD}	O/P	Tape Reel
UM68TxxL-T92-K	UM68TxxG-T92-K	TO-92	V _{SS}	V _{DD}	O/P	Bulk

<p>UM68TXXL-T92-B</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Lead Plating (4) Song Series 	<ul style="list-style-type: none"> (1) B: Tape Box, K: Bulk, R: Tape Reel (2) T92: TO-92 (3) L: Lead Free, G: Halogen Free (4) xx: refer to SONG SERIES LIST
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SONG SERIES LIST

P/N	SONG NAME
UTC UM68T05	Sweet Home
UTC UM68T08	Happy Birthday
UTC UM68T19	For Alice

■ ABSOLUTE MAXIMUM RATING

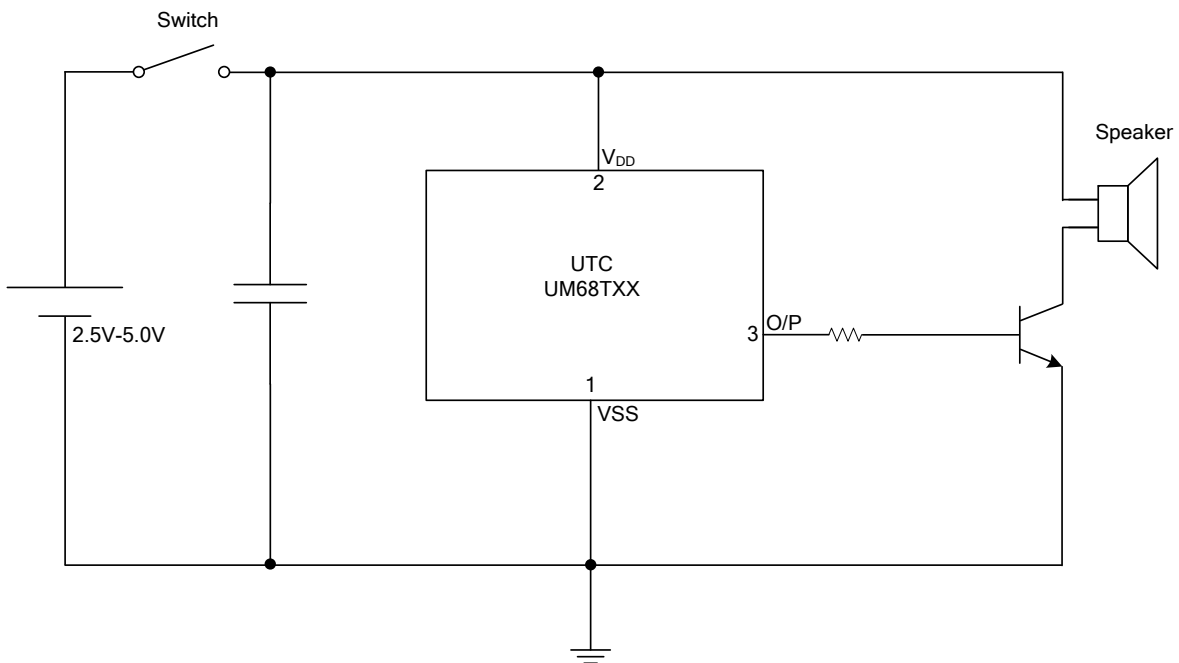
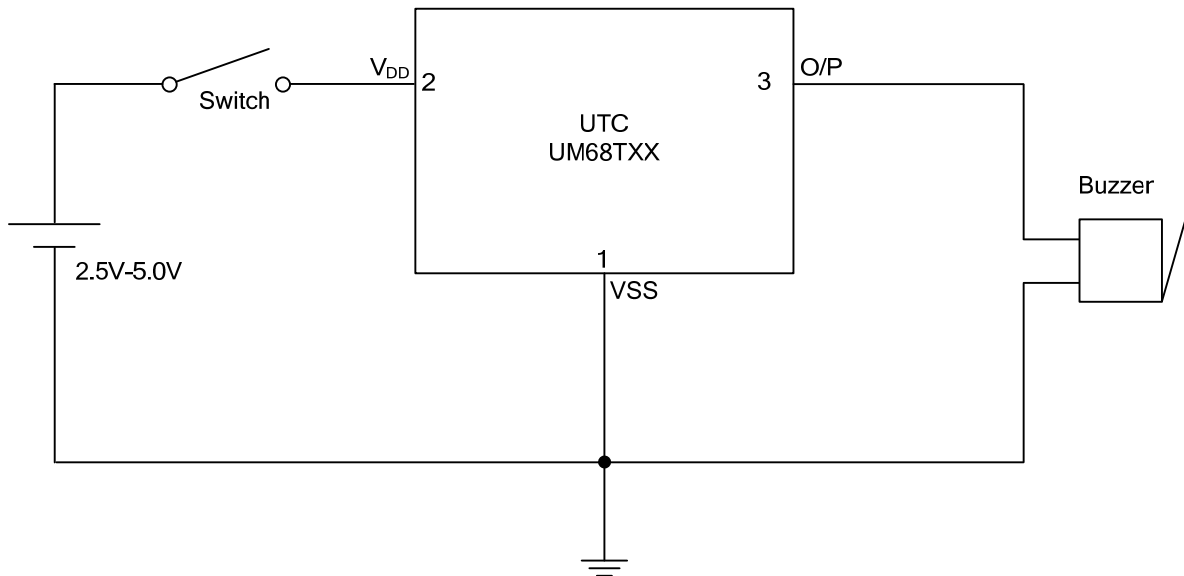
PARAMETER	SYMBOL	RATINGS	UNIT
DC Supply Voltage	V_{CC}	0V~5V	V
Input/output Voltage	V_{IN}/V_{OUT}	GND-0.2V~ V_{DD} +0.2V	V
Junction Temperature	T_J	125	°C
Operating Temperature	T_{OPR}	-20~+85	°C
Storage Temperature	T_{STG}	-40~+150	°C

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.

■ ELECTRICAL CHARACTERISTICS ($V_{DD}=3.0V$, GND=0V, $T_A=25^{\circ}C$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Operating Voltage	V_{DD}		2.5	3.0	5	V
Operating Current	I_{DD}			3	10	mA

■ TYPICAL APPLICATION CIRCUIT



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