

SANYO

No.1077C

LB8555D, 8555S**General-Purpose Timer****Overview**

The LB8555 is a delay time generator IC capable of generating exact timing pulses. Both trigger pin and reset pin are provided for various uses such as monostable multivibrator, astable multivibrator. The output circuit is capable of applying 200mA sink/source current. Output is interfaceable to TTL. This IC is usable as a replacement for Signetics-made NE555.

Features

- Timing time settable from several $\mu\text{sec.}$ to several hours
- Monostable multivibrator consisting of $R=1$, $C=1$; astable multivibrator consisting of $R=2$, $C=1$
- Adjustable duty cycle of pulse
- 200mA sink/source current for driving external load

Applications

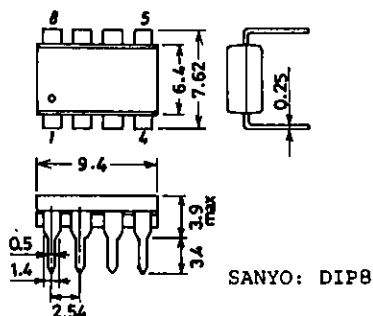
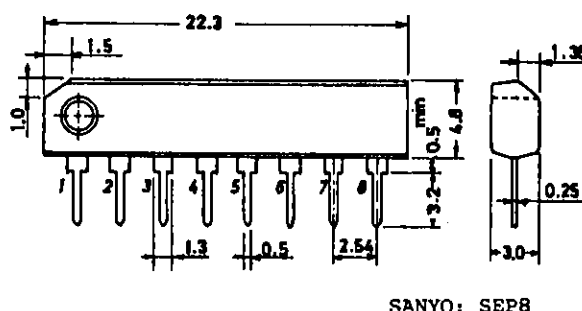
- Delay time generator (monostable multivibrator)
- Pulse generator (astable multivibrator)
- Pulse width modulator
- Sequence timer
- DC-DC converter

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			unit
Maximum Supply Voltage	$V_{CC \text{ max}}$	18	V
Output Current	I_{OUT}	± 200	mA
Input Voltage		V_{CC}	V
	Trigger, control voltage, reset, threshold		
Allowable Power Dissipation	$P_d \text{ max}$	625	mW
Operating Temperature	T_{opr}	-20 to $+75$	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to $+125$	$^\circ\text{C}$

Allowable Operating Range at $T_a = 25^\circ\text{C}$

			unit
Supply Voltage	V_{CC}	4.5 to 16	V
Input Voltage	V_i	V_{CC}	V
	Trigger, control voltage, reset, threshold		
Output Current	I_O	± 200	mA

Package Dimensions 3001B
(unit: mm)**Package Dimensions 3016B**
(unit: mm)

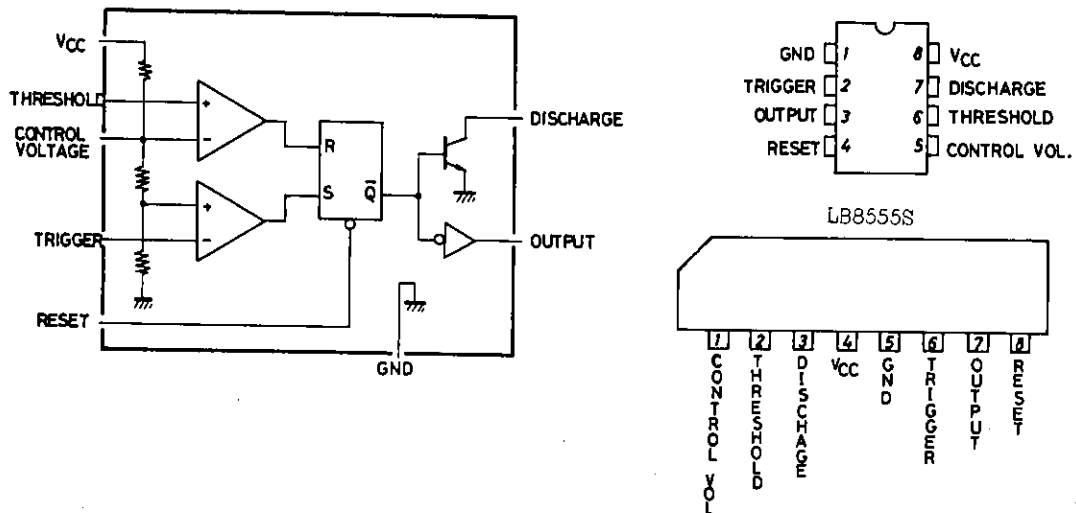
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LB8555D,8555S

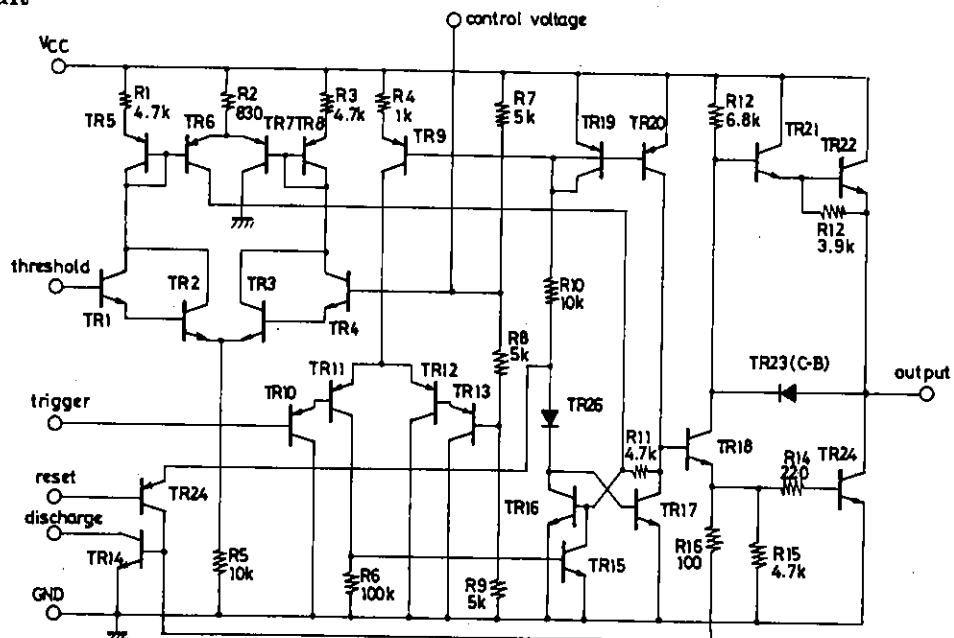
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Supply Current	I_{CC1}	$V_{CC}=5V, R_L=\infty$		3	6	mA
	I_{CC2}	$V_{CC}=15V, R_L=\infty$		10	15	mA
Control Voltage	V_{con1}	$V_{CC}=5V$	2.6	3.33	4.0	V
	V_{con2}	$V_{CC}=15V$	9	10	11	V
Threshold Voltage	V_{TH}			$2/3 V_{CC}$		V
Threshold Current	I_{TH}			0.1	0.25	μA
Trigger Voltage	V_T			$1/3 V_{CC}$		V
Trigger Current	I_T			0.5	1.0	μA
Reset Voltage	V_{rs}		0.35	0.7	1.0	V
Reset Current	I_{rs}			0.1		mA
Output 'L'-Level Voltage	V_{OL}	$V_{CC}=5V, I_{sink}=5mA$		0.25	0.35	V
		$V_{CC}=15V, I_{sink}=10mA$		0.1	0.25	V
		$V_{CC}=15V, I_{sink}=100mA$		2.0	2.5	V
Output 'H'-Level Voltage	V_{OH}	$V_{CC}=5V, I_{source}=100mA$	2.75	3.3		V
		$V_{CC}=15V, I_{source}=100mA$	12.75	13.3		V

Equivalent Circuit Block Diagram and Pin Assignment



Equivalent Circuit



Unit (resistance: Ω)

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