

SANYO

No.1143B

LB8555M

General-Purpose Timer

Overview

The LB8555M 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 the 555 type.

Features

- Miniflat package enabling compactness of sets
- Timing time settable from several μ 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

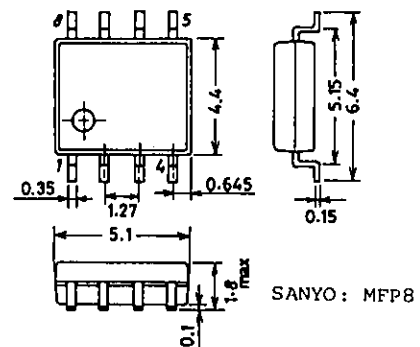
- Delay time generator (monostable multivibrator)
- Pulse generator (astable multivibrator)
- Pulse width modulator
- Sequence timer
- DC-DC converter

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	Trigger, control voltage, reset, threshold	V_{CC}	V
Allowable Power Dissipation	$P_d \text{ max}$	300	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	Trigger, control voltage, reset, threshold	V_{CC} V
Output Current	I_O	± 200	mA

Package Dimensions 3032B
(unit: mm)

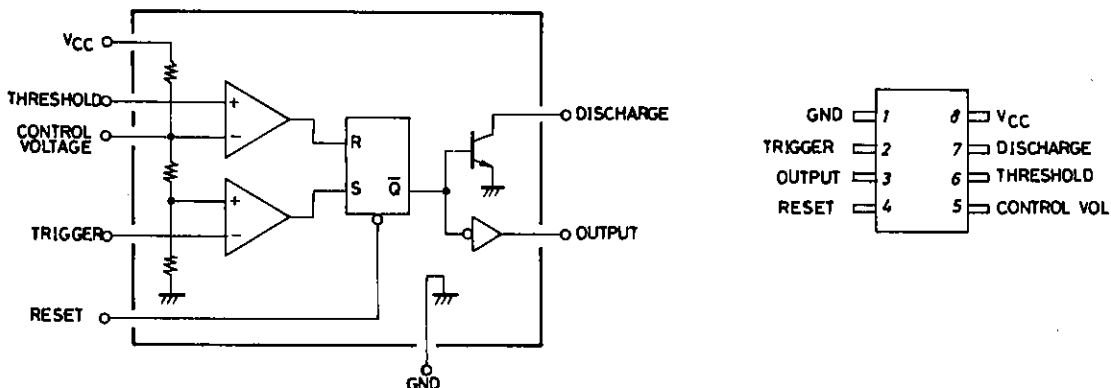
SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE: Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

LB8555M

Electrical Characteristics at Ta = 25°C

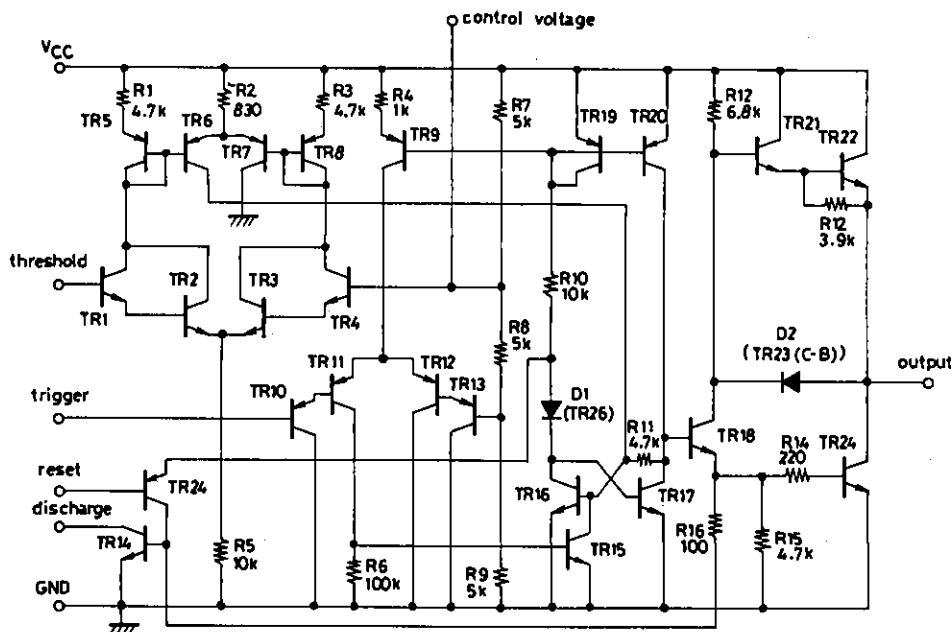
			min	typ	max	unit
Supply Current	I_{CC1}	$V_{CC} = 5V, R_L = \infty$		3		mA
	I_{CC2}	$V_{CC} = 15V, R_L = \infty$		10	15	mA
Control Voltage	V_{con1}	$V_{CC} = 5V$	2.6	3.33	4.0	V
	V_{con2}	$V_{CC} = 15V$	9	10	11	V
Threshold Voltage	V_{TH}			$2/3 V_{CC}$		V
Threshold Current	I_{TH}			0.1		μA
Trigger Voltage	V_T			$1/3 V_{CC}$		V
Trigger Current	I_T			0.5	1.0	μA
Reset Voltage	V_{rs}			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)



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.