

**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  $\mu$ 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  $T_a = 25^\circ\text{C}$** 

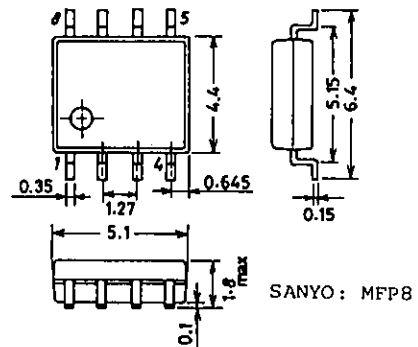
			unit
Maximum Supply Voltage	$V_{CC \text{ max}}$	18	V
Output Current	$I_{OUT}$	$\pm 200$	mA
Input Voltage	Trigger, control voltage, reset, threshold	$V_{CC}$	V
Allowable Power Dissipation	$P_d \text{ max}$	300	mW
Operating Temperature	$T_{opr}$	-20 to +75	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-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	$I_O$	$\pm 200$	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

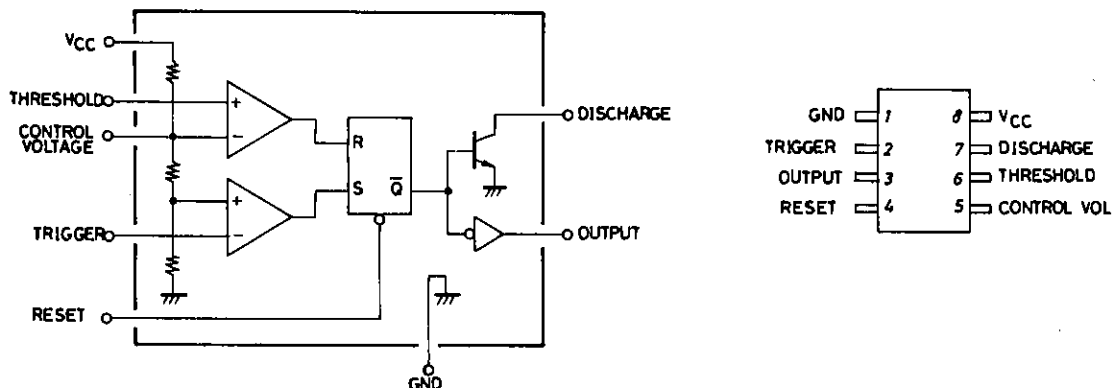
1090TA/9117KI/8075KI/7282KI, TS No.1143-1/3

# LB8555M

## Electrical Characteristics at $T_a = 25^\circ\text{C}$

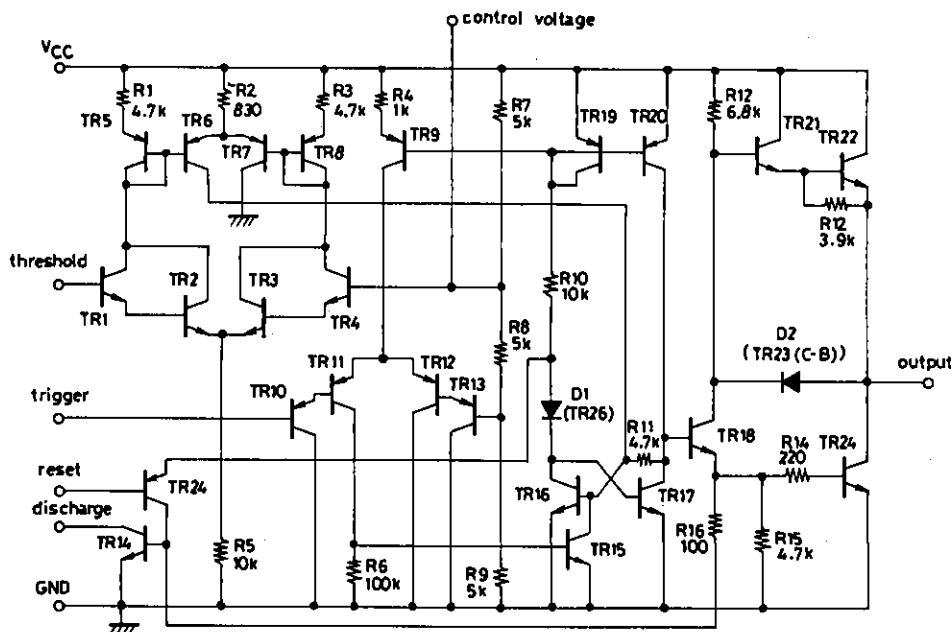
			min	typ	max	unit
Supply Current	$I_{CC1}$	$V_{CC} = 5V, R_L = \infty$		3		mA
	$I_{CC2}$	$V_{CC} = 15V, R_L = \infty$		10	15	mA
Control Voltage	$V_{con1}$	$V_{CC} = 5V$	2.6	3.33	4.0	V
	$V_{con2}$	$V_{CC} = 15V$	9	10	11	V
Threshold Voltage	$V_{TH}$			$2/3 V_{CC}$		V
Threshold Current	$I_{TH}$			0.1		$\mu\text{A}$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

## Equivalent Circuit Block Diagram and Pin Assignment



## Equivalent Circuit

Unit (resistance:  $\Omega$ )



- 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.