

SANYO	NO.2300A	Monolithic Linear IC
		LA5667
Multifunction Multiple Voltage Regulator		

Use

- Especially suited for use in micorcomputer-controlled tuners, receivers, preamps and the like

Functions and Features

- Two independent regulators contained in a single chip (13.0V/350mA, 5.6V/100mA)
- Reset circuit which delivers the reset signal on the positive transition, negative transition of the 5.6V output
- Muting circuit which detects the 13.0V input and reset output to deliver the muting signal
(We have the LA5665 whose detection function for reset, muting is provided on the output voltage side.)

Maximum Ratings at Ta=25°C

			unit
Input Voltage	$V_{IN1,2}$	36	V
Output Current	$I_{OUT1,2}$ Internal		
Allowable Power Dissipation	P_{dmax} IC only	1.6	W
Operating Temperature	T_{opr}	-30 to +80	°C
Storage Temperature	T_{stg}	-40 to +125	°C

Operating Conditions at Ta=25°C

			unit
Input Voltage	V_{IN1}	$I_{OUT1}=200mA$	16.2 to 35
	V_{IN2}	$I_{OUT2}=50mA$	8.7 to 35

Operating Characteristics at Ta=25°C, $V_{IN1}=20V, V_{IN2}=10V$

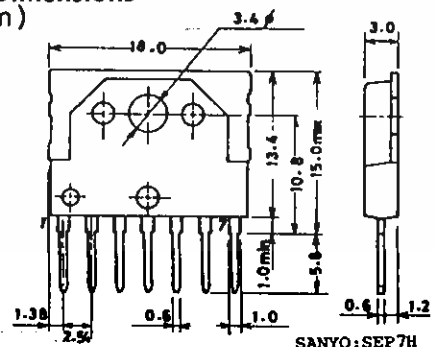
			min	typ	max	unit
Quiescent Current	I_{IN1}		1.8	2.8	3.8	mA
	I_{IN2}		3.8	5.8	7.8	mA
Output Voltage	V_{o1}	$I_{OUT1}=200mA$	12.3	13.0	13.7	V
	V_{o2}	$I_{OUT2}=50mA$	5.2	5.6	6.0	V
Line Regulation	V_{ol1}	$V_{IN2}=19$ to 27V		6	20	mV
	V_{ol2}	$V_{IN2}=9$ to 18V		2	20	mV
Load Regulation	V_{old1}	$I_o=0$ to 350mA		10	30	mV
	V_{old2}	$I_o=0$ to 100mA		2	20	mV
Ripple Rejection	$Rr1$	$f=120Hz, I_o=200mA$	56	65		dB
	$Rr2$	$f=120Hz, I_o=50mA$	60	75		dB

Continued on next page.

Package Dimensions

(unit: mm)

3075



SANYO:SEP7H



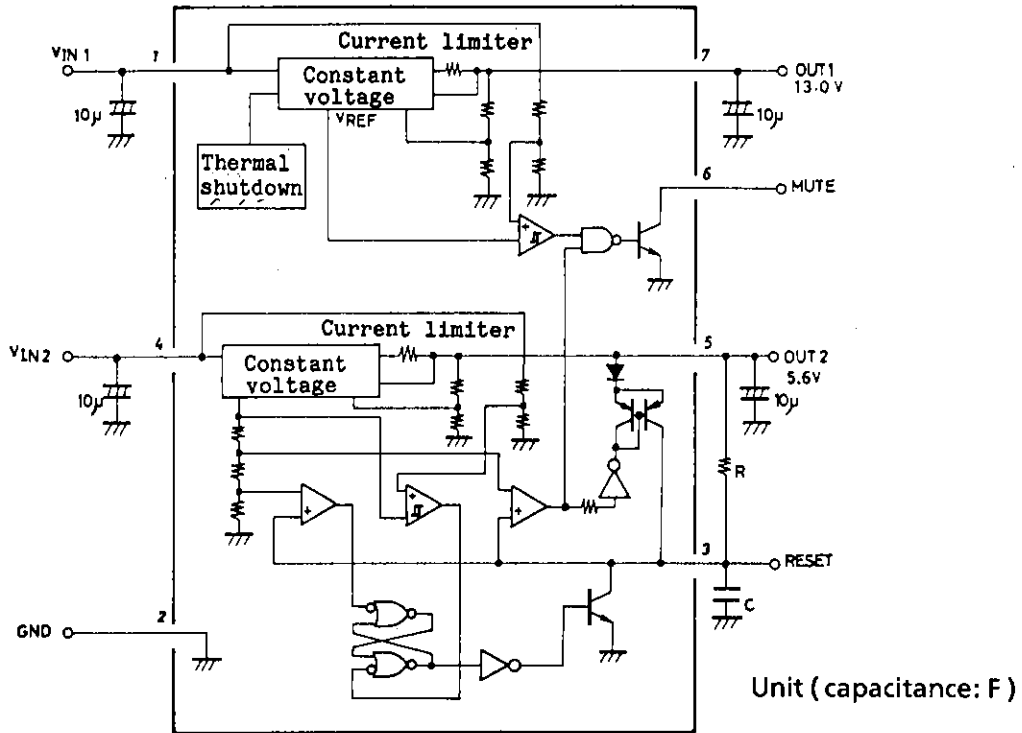
Continued from preceding page.

			min	typ	max	unit
Input-Output Voltage Drop	Vdr1	I _o =200mA		1.6	2.5	V
	Vdr2	I _o =50mA		1.5	2.5	V
Reset Detect Voltage	ΔV _R	ΔV _R =V _R -V _{o2} , I _{o2} =50mA	1.65	1.9	2.2	V
Reset Detect Hysteresis Voltage	ΔV _H		50	75	110	mV
Timer Compare Voltage	V _{C1}		1.0	1.2	1.4	V
	V _{C2}		0.06	0.13	0.18	V
Timer Input Bias Current	I _{TB}	(Note2)			250	nA
Muting Detect Voltage	ΔV _M	ΔV _M =V _M -V _{o1} , I _{o1} =200mA	1.0	1.5	2.0	V
Muting Output Voltage	V _{OMUTE}	I _{OMUTE} =5mA		0.1	0.15	V
Muting Detect Hysteresis Voltage	ΔV _{MH}		110	160	210	mV

Note 1: V_R is the voltage of V_{IN2} at the time reset is turned OFF.

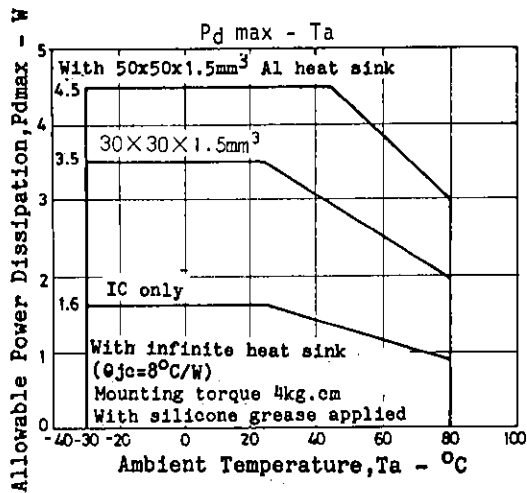
Note 2: V_M is the voltage of V_{IN1} at the time muting is turned OFF.

Equivalent Circuit Block Diagram, Pin Assignment, and Peripheral Circuit

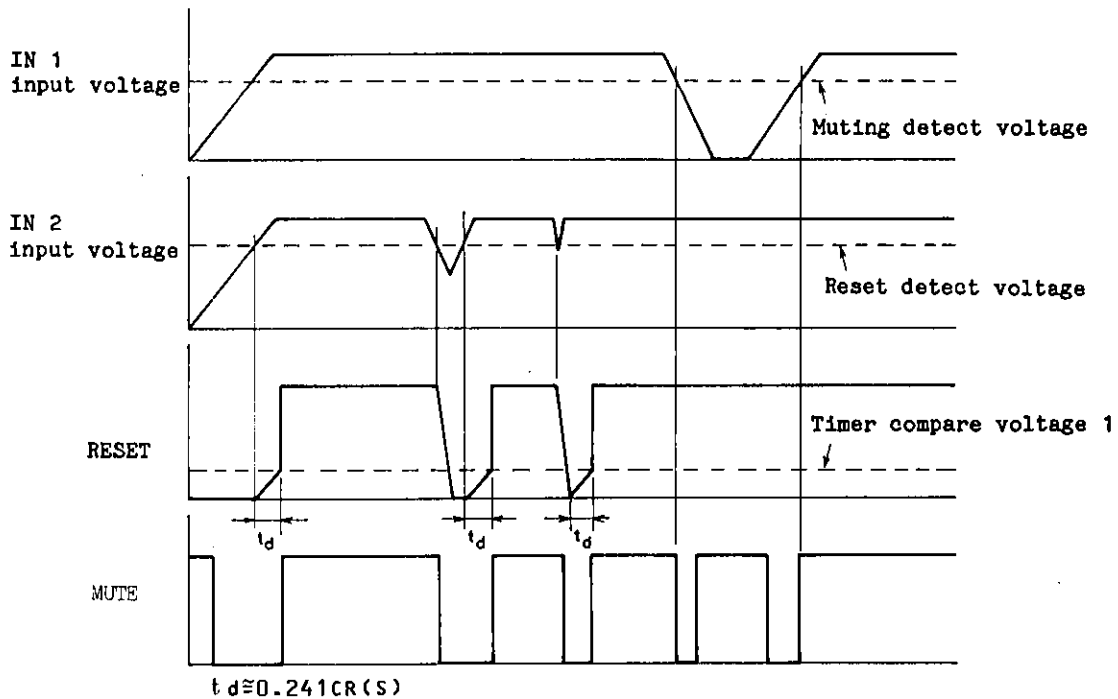


(Note) The reset delay time is set by R, C.

Pin No.	Name	Description
1	V _{IN1}	Input pin for 13.0V output line
2	GND	Ground
3	RESET	Reset delay time and output pin
4	V _{IN2}	Input pin for 5.6V output line
5	OUT2	5.6V output pin
6	MUTE	Muting signal output pin
7	OUT1	13.0V output pin



Operating Waveforms



■ 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.