

SANYO

No.2301B

LA5665**Multifunction Multiple Voltage Regulator****Use**

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

Functions and Features

- Two independent voltage regulators contained in a single chip (15.5V/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 15.5V output and reset output to deliver the muting signal
- (We have the LA5666 whose detection function for reset, muting is provided on the input voltage side.)

Maximum Ratings at Ta=25°C

			unit
Input Voltage	$V_{IN1,2}$	35	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}	$I_{OUT1}=200mA$	19 to 35 V
	V_{IN2}	$I_{OUT2}=50mA$	8.7 to 35 V

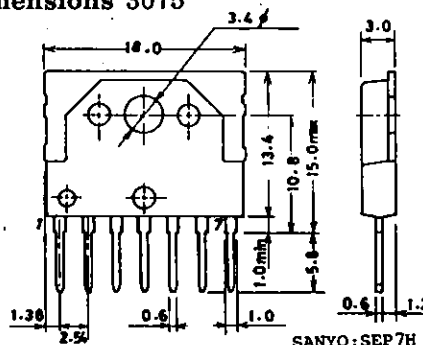
Operating Characteristics at Ta=25°C, $V_{IN1}=20V$, $V_{IN2}=10V$

			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}	$I_{OUT1}=200mA$	14.5	15.5	16.5	V
	V_{o2}	$I_{OUT2}=50mA$	5.1	5.6	6.2	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

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Package Dimensions 3075

(unit: mm)



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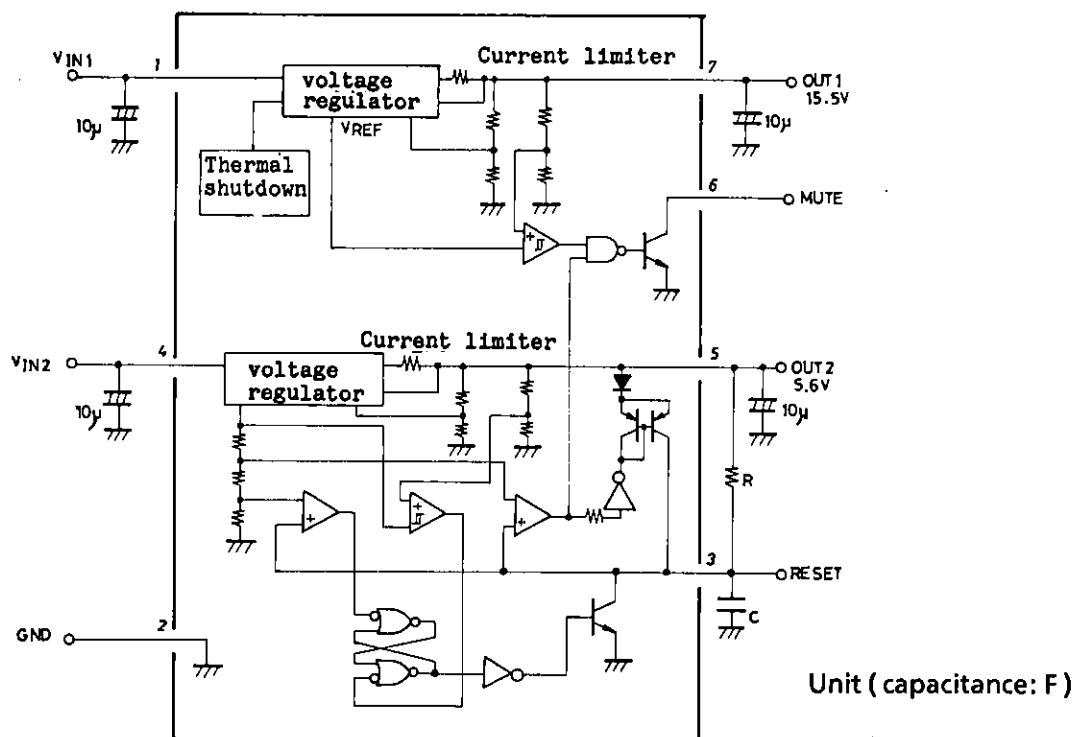
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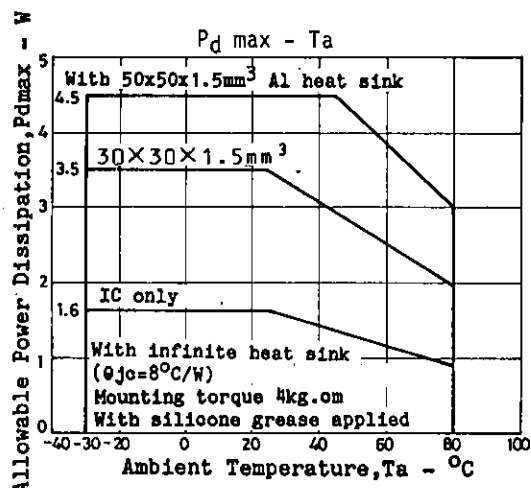
			min	typ	max	unit
Input-Output Voltage Drop	V _{dr1}	I _o =200mA		1.6	2.5	V
	V _{dr2}	I _o =50mA		1.5	2.5	V
Reset Detect Voltage	V _R	(Note 1)	4.9	5.1	5.5	V
Timer Compare Voltage	V _{C1}		1.0	1.2	1.4	V
	V _{C2}		0.06	0.13	0.18	V
Timer Input Bias Current	I _{TB}				250	nA
Muting Detect Voltage	V _M	(Note 2)	13.5	14.5	15.5	V
Muting Output Voltage	V _{OMUTE}	I _{OMUTE} =5mA		0.1	0.15	V

Note 1: V_R is the voltage of V_{O2} at the time reset is turned OFF.
Note 2: V_M is the voltage of V_{O1} at the time muting is turned OFF.

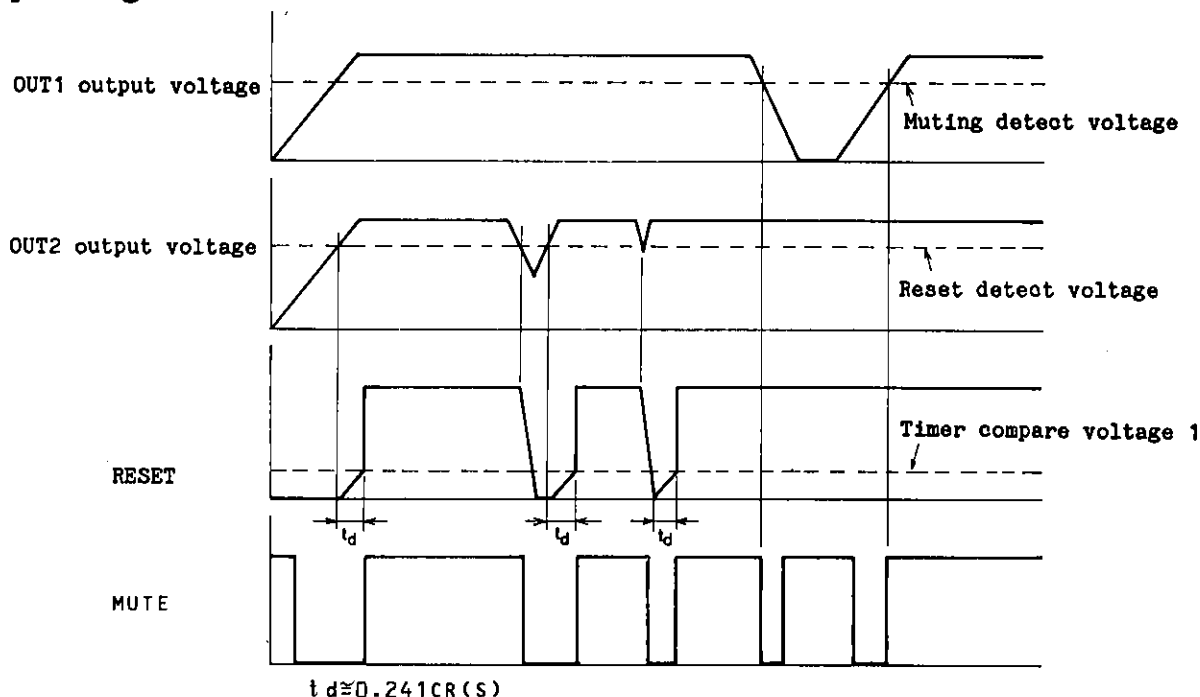
Equivalent Circuit Block Diagram, Pin Assignment, and Peripheral Circuit

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

Pin No.	Name	Description
1	V _{IN1}	Input pin for 15.5V 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	15.5V output pin



Operating Waveforms



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