

SANYO

No. 920E

LA7910**TV Tuner Band Selector**

The LA7910 is an IC for tuner band selection of electronic tuning type television set. This IC is used for producing the VHF channel "L" band power supply/VHF channel "H" band power supply/UHF channel power supply for tuner and the CATV power supply according to the band select signal of 2 inputs.

Functions

- . VHF "L" band power supply output.
- . VHF "H" band power supply output.
- . UHF power supply output.
- . CATV power supply output.

Features

- . 2 inputs and 4 outputs.
- . Low output saturation voltage : 0.25V typ., $I_O=60\text{mA}$
- . Compact 9-pin single-end package.

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

			unit
Maximum Supply Voltage	V_9 max	15	V
Maximum Load Current	I_1 max, I_2 max, I_7 max, I_8 max	-60	mA
Maximum Supply Current V_{CC2}	I_6 max	10	mA
Allowable Power Dissipation	P_d max	200	mW
Operating Temperature	T_{opr}	-20 to +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$
Input Current	I_3 max, I_4 max	2	mA

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

		min	typ	max	unit
Current Dissipation	I_1, I_2, I_7, I_8			60	mA
Output Saturation Voltage	$V_O(\text{sat})$ $V_9=12\text{V}, I_6=5\text{mA}, I_O=60\text{mA}$	0	0.25	0.7	V
Input "H" Level Threshold Voltage	V_{TH}			3.0	V
Input "L" Level Threshold Voltage	V_{TL}	0.8			V
Output Leak Current	I_1, I_2, I_7, I_8 $T_a \leq 70^\circ\text{C}$			50	μA

Note) Current direction :

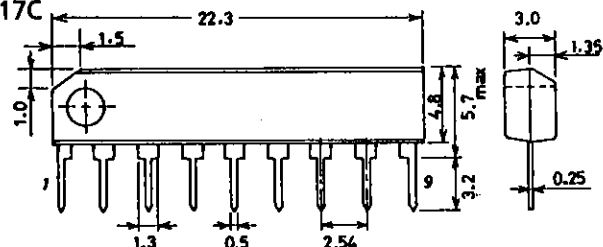
Current flowing into IC : Plus (No sign)

Current flowing out of IC : Minus (-)

Package Dimensions

(unit : mm)

3017C



SANYO : SIP9

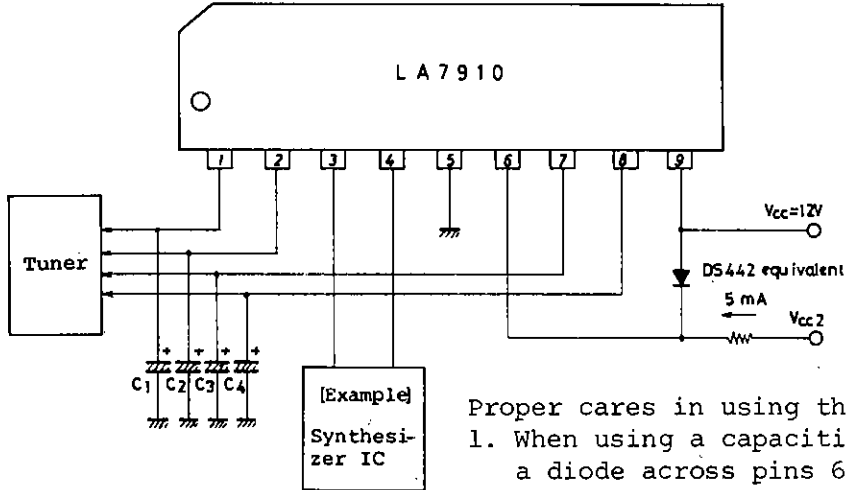
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Truth Table

Input		Output			
Pin 3	Pin 4	Pin 1	Pin 2	Pin 7	Pin 8
L	L	H	Z	Z	Z
H	L	Z	H	Z	Z
L	H	Z	Z	H	Z
H	H	Z	Z	Z	H

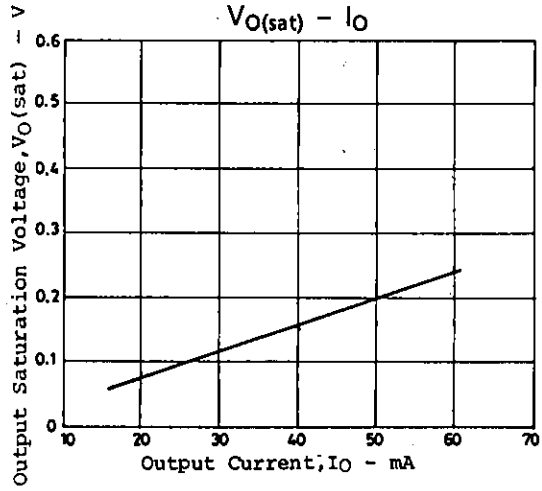
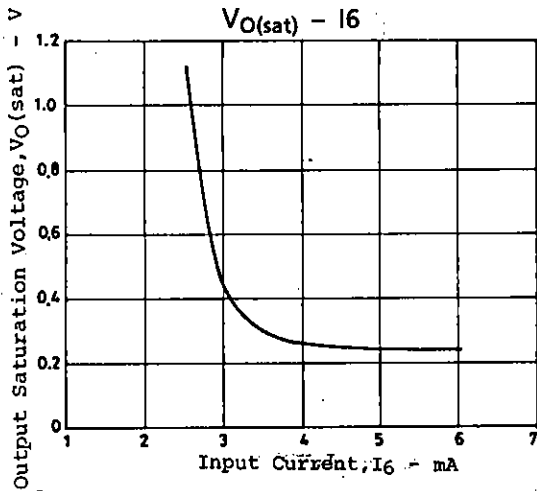
Input threshold voltage
: $V_{TL}=0.8V, V_{TH}=3V$

Sample Application Circuit



Proper cares in using the IC

1. When using a capacitive load, connect a diode across pins 6 and 9 as shown above.
2. The value of load capacitors C1, C2, C3, C4 must not exceed 22uF.



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