

**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	$\mu\text{A}$

Note) Current direction :

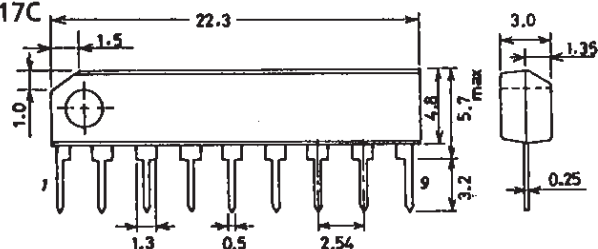
Current flowing into IC : Plus (No sign)

Current flowing out of IC : Minus (-)

**Package Dimensions**

(unit : mm)

3017C



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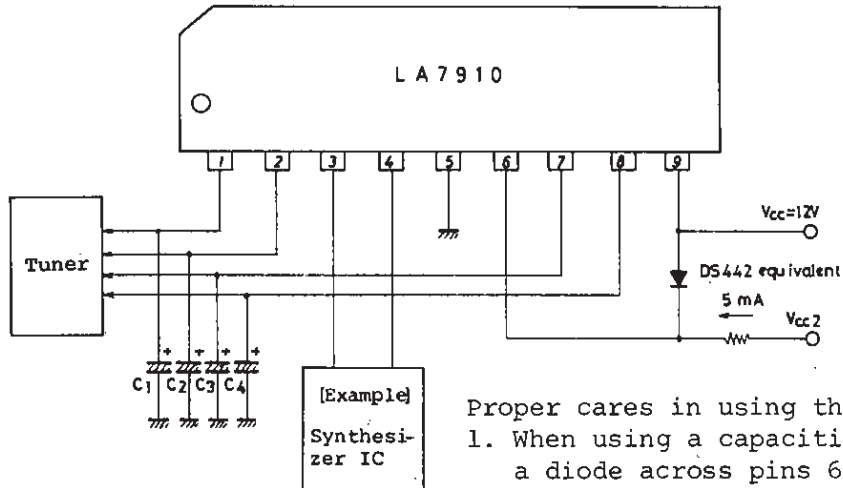
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Truth Table

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

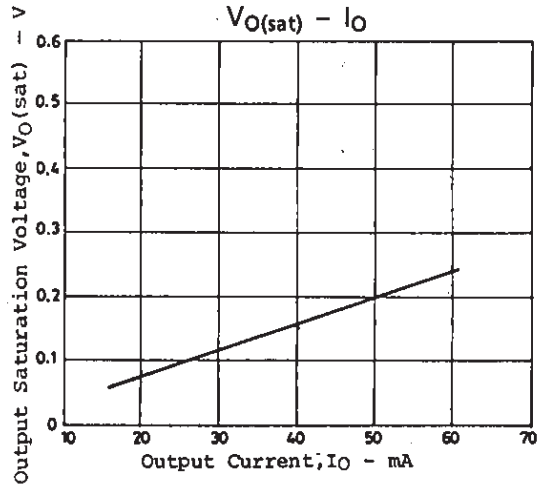
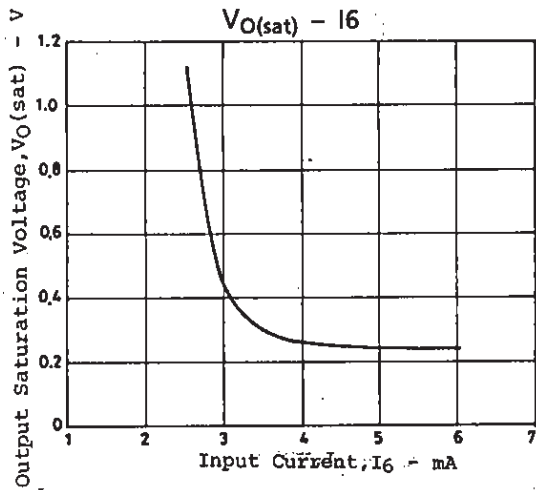
Input threshold voltage  
:  $V_{TL}=0.8V, V_{TH}=3V$

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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