

**SANYO**

No.954E

**LA7920****TV Tuner Band Selector**

The LA7920 is a tuner band selector IC intended for use in electronic tuning type TV sets. It outputs supply voltages to the tuner unit according to 2-input band select signals.

**Features**

- . 2 inputs, 4 outputs.
- . Decoders of 2 types available by changing-over C pin.
- . Single-supply operation (Output transistor: pnp type).
- . Low output saturation voltage.

**Maximum Ratings at Ta=25°C**

|                             |            |             | unit |
|-----------------------------|------------|-------------|------|
| Maximum Supply Voltage      | VCCmax     | 14          | V    |
| Maximum Applied Voltage     | V6, V7     | -12         | V    |
| Maximum Load Current        | I06max(f1) | -20         | mA   |
|                             | I01max(f2) | -35         | mA   |
|                             | I07max(f3) | -20         | mA   |
|                             | I02max(f4) | -35         | mA   |
| Input Current               | IINmax     | 2           | mA   |
| Allowable Power Dissipation | Pdmax      | 400         | mW   |
| Operating Temperature       | Topr       | -20 to +65  | °C   |
| Storage Temperature         | Tstg       | -55 to +125 | °C   |

**Operating Characteristics at Ta=25°C**

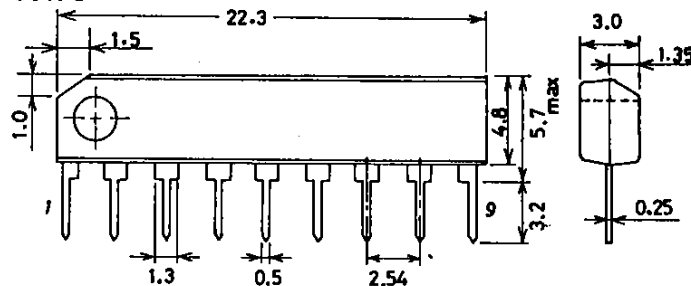
|                           |         | min | typ | max | unit |
|---------------------------|---------|-----|-----|-----|------|
| Quiescent Current         | Icco    |     | 13  | 18  | mA   |
| Output Saturation Voltage | V0(sat) | 0   |     | 0.7 | V    |
| Input Threshold voltage   | VTH     | 0.8 | 1.5 | 3.0 | V    |
| Output Leak Current       | I6, I7  |     |     | 50  | μA   |

(Note) Current flowing into IC : + (no sign)  
Current flowing out of IC : -

**Package Dimensions**

(unit : mm)

3017C



SANYO : SIP9

**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

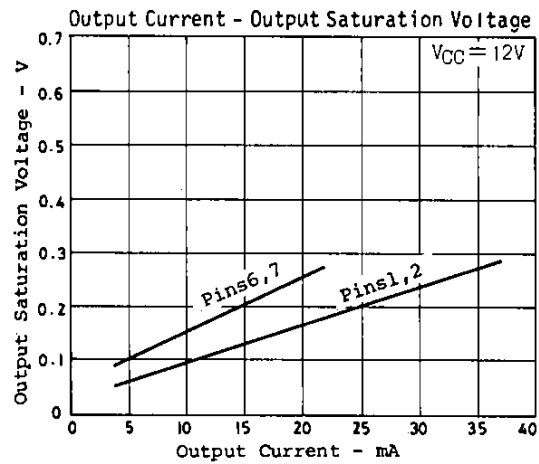
O3095MH / N178YT / 3204KI / 6023KI / O122KI, TS №954-1/3

Truth Table

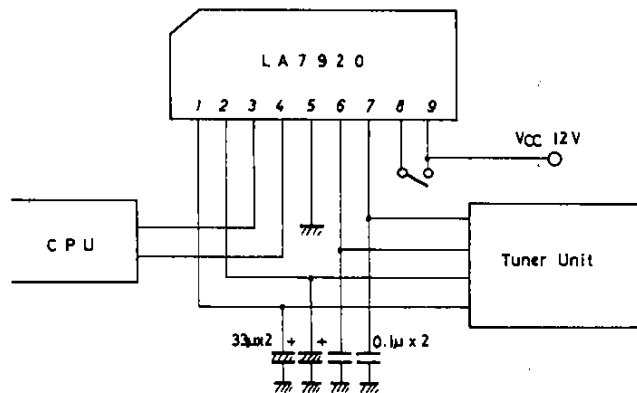
| Input   |         | Control Pin     | Output                |                       |                       |                       |
|---------|---------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|
| A(Pin3) | B(Pin4) | C(Pin8)         | f <sub>1</sub> (Pin6) | f <sub>2</sub> (Pin1) | f <sub>3</sub> (Pin7) | f <sub>4</sub> (Pin2) |
| H       | H       | V <sub>CC</sub> | Z                     | Z                     | Z                     | H                     |
| L       | H       | "               | Z                     | Z                     | H                     | H                     |
| H       | L       | "               | Z                     | H                     | Z                     | Z                     |
| L       | L       | "               | H                     | Z                     | H                     | H                     |
| H       | H       | Open            | H                     | Z                     | Z                     | H                     |
| L       | H       | "               | Z                     | Z                     | H                     | H                     |
| H       | L       | "               | Z                     | H                     | Z                     | Z                     |
| L       | L       | "               | H                     | Z                     | H                     | H                     |

Z : High impedance

Output Current - Output Saturation Voltage Characteristics



Sample Application Circuit



Unit (capacitance:F)

- 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.

This catalog provides information as of **June, 1996**. Specifications and information herein are subject to change without notice.