



SANYO Semiconductors

## DATA SHEET

Monolithic Linear IC

An ON Semiconductor Company

LA73031V

For DVD Recorder

## Video Signal Input Switch

## Overview

This LA73031V is a video signal input switch for DVD recorder.

## Functions

- Six input switches × one channel
- Five input switches × two channels
- Keyed clamp
- 6dB amplifier
- 6MHz low pass filter
- Video signal detection
- Composite sync output
- Standby mode

## Specifications

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

| Parameter                   | Symbol               | Conditions                    | Ratings     | Unit             |
|-----------------------------|----------------------|-------------------------------|-------------|------------------|
| Maximum supply voltage      | $V_{CC \text{ max}}$ |                               | 7.0         | V                |
| Allowable power dissipation | $P_d \text{ max}$    | $T_a \leq 75^\circ\text{C}^*$ | 780         | mW               |
| Operating temperature       | $T_{opr}$            |                               | -20 to +75  | $^\circ\text{C}$ |
| Storage temperature         | $T_{stg}$            |                               | -40 to +150 | $^\circ\text{C}$ |

\* When mounted on a  $114.3 \times 76.1 \times 1.6 \text{ mm}^3$  glass epoxy resin.

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

| Parameter                           | Symbol               | Conditions | Ratings                            | Unit |
|-------------------------------------|----------------------|------------|------------------------------------|------|
| Recommending operation voltage      | $V_{CC}$             |            | 5.0                                | V    |
| Operating voltage range             | $V_{CC \text{ opr}}$ |            | 4.75 to 5.25                       | V    |
| Input pin voltage application range | $V_{IN}$             |            | -0.3 to $V_{CC \text{ opr}} + 0.3$ | V    |

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# LA73031V

## Electrical Characteristics at Ta = 25°C, VCCV = ±5.0V

| Parameter                            | Symbol           | Input signal      |        |           |                 | Output Point   | Test Conditions   | Ratings |     |      | Unit | Control Voltage Unit: V |    |    |     |     |     |     |     |     |   |
|--------------------------------------|------------------|-------------------|--------|-----------|-----------------|--|---|---------|-----|------|------|-------------------------|----|----|-----|-----|-----|-----|-----|-----|---|
|                                      |                  | Point             | Signal | Freq [Hz] | Amplitude [p-p] |  |   | min     | typ | max  |      | V4                      | V7 | V9 | V17 | V19 | V21 | V23 | V25 | V28 |   |
| Current dissipation                  | I <sub>CC1</sub> |                   |        |           |                 | V <sub>CC1</sub><br>V <sub>CC2</sub><br>V <sub>CC3</sub><br>V <sub>CC4</sub> | Measure the sum of currents flowing into V <sub>CC1</sub> , V <sub>CC2</sub> , V <sub>CC3</sub> and V <sub>CC4</sub> with no signal.  | 60      | 75  | 90   | mA   | 0                       | 0  | 5  | 5   | 0   | 0   | 0   | 0   | 0   | 0 |
| Current dissipation at standby mode  | I <sub>CC2</sub> |                   |        |           |                 | V <sub>CC1</sub><br>V <sub>CC2</sub><br>V <sub>CC3</sub><br>V <sub>CC4</sub> | Measure the sum of currents flowing into V <sub>CC1</sub> , V <sub>CC2</sub> , V <sub>CC3</sub> and V <sub>CC4</sub> at standby mode. | 7.5     | 9   | 10.5 | mA   |                         |    |    |     |     |     |     | 5   |     |   |
| Output level of composite            | C40              | V <sub>IN40</sub> | SG1    |           | 1V              | T38  | Measure the output sync tip level at T38.   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 5  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | C42              | V <sub>IN42</sub> | SG1    |           | 1V              | T38  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 5  | 5   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | C44              | V <sub>IN44</sub> | SG1    |           | 1V              | T38  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 5  | 0   | 5   | 0   | 0   | 0   | 0   | 5 |
|                                      | C1               | V <sub>IN1</sub>  | SG1    |           | 1V              | T38  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 5  | 5   | 5   | 0   | 0   | 0   | 0   | 5 |
|                                      | C3               | V <sub>IN3</sub>  | SG1    |           | 1V              | T38  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 5  | 0   | 0   | 5   | 0   | 0   | 0   | 5 |
| Output level of chroma               | C8               | V <sub>IN8</sub>  | SG2    |           | 714mV           | T31  | Measure the output center level at T31.   | 1.9     | 2.2 | 2.5  | V    | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | C10              | V <sub>IN10</sub> | SG2    |           | 714mV           | T31  |   | 1.9     | 2.2 | 2.5  | V    | 0                       | 5  | 0  | 5   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | C12              | V <sub>IN12</sub> | SG2    |           | 714mV           | T31  |   | 1.9     | 2.2 | 2.5  | V    | 0                       | 5  | 0  | 0   | 5   | 0   | 0   | 0   | 0   | 5 |
|                                      | C14              | V <sub>IN14</sub> | SG2    |           | 714mV           | T31  |   | 1.9     | 2.2 | 2.5  | V    | 0                       | 5  | 0  | 5   | 5   | 0   | 0   | 0   | 0   | 5 |
|                                      | C16              | V <sub>IN16</sub> | SG2    |           | 714mV           | T31  |   | 1.9     | 2.2 | 2.5  | V    | 0                       | 5  | 0  | 0   | 0   | 5   | 0   | 0   | 0   | 5 |
| Output level of Y                    | C18              | V <sub>IN18</sub> | SG3    |           | 1V              | T29  | Measure the output sync tip level at T29.   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | C20              | V <sub>IN20</sub> | SG3    |           | 1V              | T29  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 0  | 5   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | C22              | V <sub>IN22</sub> | SG3    |           | 1V              | T29  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 0  | 0   | 5   | 0   | 0   | 0   | 0   | 5 |
|                                      | C24              | V <sub>IN24</sub> | SG3    |           | 1V              | T29  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 0  | 5   | 5   | 0   | 0   | 0   | 0   | 5 |
|                                      | C26              | V <sub>IN26</sub> | SG3    |           | 1V              | T29  |   | 0.7     | 0.8 | 0.9  | V    | 0                       | 5  | 0  | 0   | 0   | 5   | 0   | 0   | 0   | 5 |
| Pedestal level of component output   | PC38             | V <sub>IN6</sub>  | SG4    |           | 1V              | T38  | Measure the output pedestal level at T38 and T29.   | 2.2     | 2.3 | 2.4  | V    | 5                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | PC31             | V <sub>IN8</sub>  | SG4    |           | 1V              | T31  |   | 2.2     | 2.3 | 2.4  | V    | 5                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      |                  | V <sub>IN18</sub> | SG3    |           | 1V              |  |   |         |     |      |      |                         |    |    |     |     |     |     |     |     |   |
| 6dB amp gain                         | G40H             | V <sub>IN40</sub> | SG1    | 100k      | 1V              | T38  | Measure the gain to input of each output.<br>20log(V <sub>OUT</sub> /V <sub>IN</sub> )  | 5.5     | 6   | 6.5  | dB   | 0                       | 5  | 5  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | G8H              | V <sub>IN8</sub>  | SG1    | 100k      | 714mV           | T31  |   | 5.5     | 6   | 6.5  | dB   | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | G18H             | V <sub>IN18</sub> | SG1    | 100k      | 1V              | T29  |   | 5.5     | 6   | 6.5  | dB   | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
| 0dB amp gain                         | G40L             | V <sub>IN40</sub> | SG1    | 100k      | 1V              | T38  | Measure the gain to input of each output.<br>20log(V <sub>OUT</sub> /V <sub>IN</sub> )  | -0.5    | 0   | 0.5  | dB   | 0                       | 0  | 5  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | G8L              | V <sub>IN8</sub>  | SG1    | 100k      | 714mV           | T31  |   | -0.5    | 0   | 0.5  | dB   | 0                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | G18L             | V <sub>IN18</sub> | SG1    | 100k      | 1V              | T29  |   | -0.5    | 0   | 0.5  | dB   | 0                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
| Frequency characteristics in LPF-off | F40              | V <sub>IN40</sub> | SG1    | 10M       | 1V              | T38  | Ga-Gb   | -0.5    | 0   | 0.5  | dB   | 0                       | 5  | 5  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | F8               | V <sub>IN8</sub>  | SG1    | 10M       | 714mV           | T31  | Ga=20log(V <sub>OUT</sub> /V <sub>IN</sub> ) for 100kHz   | -0.5    | 0   | 0.5  | dB   | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
|                                      | F18              | V <sub>IN18</sub> | SG1    | 10M       | 1V              | T29  | Gb=20log(V <sub>OUT</sub> /V <sub>IN</sub> ) for 10MHz  | -0.5    | 0   | 0.5  | dB   | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 5 |
| Frequency characteristics in LPF-on1 | F40LP1           | V <sub>IN40</sub> | SG1    | 6M        | 1V              | T38  | Ga-Gb   | -3      | -1  | 0.5  | dB   | 0                       | 5  | 5  | 0   | 0   | 0   | 0   | 0   | 0   | 0 |
|                                      | F8LP1            | V <sub>IN8</sub>  | SG1    | 6M        | 714mV           | T31  | Ga=20log(V <sub>OUT</sub> /V <sub>IN</sub> ) for 100kHz   | -3      | -1  | 0.5  | dB   | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0 |
|                                      | F18LP1           | V <sub>IN18</sub> | SG1    | 6M        | 1V              | T29  | Gb=20log(V <sub>OUT</sub> /V <sub>IN</sub> ) for 6MHz   | -3      | -1  | 0.5  | dB   | 0                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0 |

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# LA73031V

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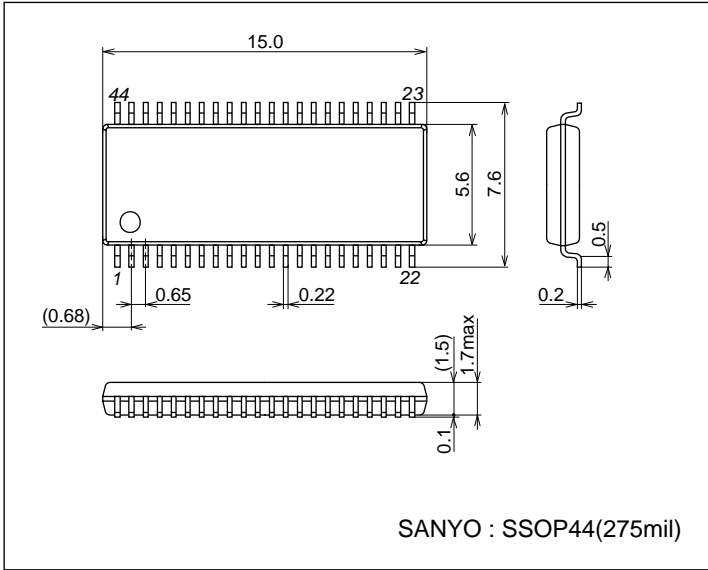
| Parameter                                | Symbol | Input signal       |        |           |                 | Output Point | Test Conditions  | Ratings              |                 |     | Unit | Control Voltage Unit: V |    |    |     |     |     |     |     |
|--|--------|--------------------|--------|-----------|-----------------|--------------|--|----------------------|-----------------|-----|------|-------------------------|----|----|-----|-----|-----|-----|-----|
|  |        | Point              | Signal | Freq [Hz] | Amplitude [p-p] |              |  | Min                  | Typ             | Max |      | V4                      | V7 | V9 | V17 | V19 | V21 | V23 | V25 |
| Frequency characteristics in LPF-on2     | F40LP2 | V <sub>IN</sub> 40 | SG1    | 14.3M     | 1V              | T38          | Ga-Gb  | -40                  | -30             | dB  | 0    | 5                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   |
|  | F8LP2  | V <sub>IN</sub> 8  | SG1    | 14.3M     | 714mV           | T31          | Ga=20log(V <sub>OUT</sub> /V <sub>IN</sub> ) for 100kHz  | -40                  | -30             | dB  | 0    | 5                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   |
|  | F18LP2 | V <sub>IN</sub> 18 | SG1    | 14.3M     | 1V              | T29          | Gb=20log(V <sub>OUT</sub> /V <sub>IN</sub> ) for 14.3MHz | -40                  | -30             | dB  | 0    | 5                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   |
| Output 2nd order distortion              | H40    | V <sub>IN</sub> 40 | SG1    | 5M        | 1V              | T38          | Measure the output 2nd harmonics component of 5MHz.      | -45                  | -35             | dB  | 0    | 5                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   |
|  | H8     | V <sub>IN</sub> 8  | SG1    | 5M        | 714mV           | T31          |  | -45                  | -35             | dB  | 0    | 5                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   |
|  | H18    | V <sub>IN</sub> 18 | SG1    | 5M        | 1V              | T29          |  | -45                  | -35             | dB  | 0    | 5                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   |
| C.SYNC Separator output high level       | CV40H  | V <sub>IN</sub> 40 | SG3    |           | 1V              | T34          | Measure the output high level at T34.                    | V <sub>CC</sub> -0.5 | V <sub>CC</sub> | V   | 0    |                         | 5  | 0  | 0   | 0   | 0   | 0   | 0   |
| C.SYNC Separator output high level       | CV40L  | V <sub>IN</sub> 40 | SG3    |           | 1V              | T34          | Measure the output low level at T34.                     | 0                    | 0.3             | 0.6 | V    | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| C.Sync separator output pulse delay time | CT40   | V <sub>IN</sub> 40 | SG3    |           | 1V              | T34          | Measure the pulse delay for input signal at T34.         | 0.85                 | 1.2             | 1.6 | μs   | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| C.Sync separator output pulse width      | CW40   | V <sub>IN</sub> 40 | SG3    |           | 1V              | T34          | Measure the pulse width at T34.                          | 3.2                  | 4.2             | 5.2 | μs   | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| V.Sync separator output high level       | VV40H  | V <sub>IN</sub> 40 | SG6    |           | 1V              | T36          | Measure the output high level at T36.                    | V <sub>CC</sub> -0.5 | V <sub>CC</sub> | V   | 0    |                         | 5  | 0  | 0   | 0   | 0   | 0   | 0   |
| V.Sync separator output low level        | VV40L  | V <sub>IN</sub> 40 | SG6    |           | 1V              | T36          | Measure the output low level at T36.                     | 0                    | 0.3             | 0.6 | V    | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| V.Sync separator output pulse delay time | VT40   | V <sub>IN</sub> 40 | SG6    |           | 1V              | T36          | Measure the pulse delay for input signal at T36.         | 11                   | 19              | 27  | μs   | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| V.Sync separator output pulse width      | VW40   | V <sub>IN</sub> 40 | SG6    |           | 1V              | T36          | Measure the pulse width at T36.                          | 150                  | 190             | 240 | μs   | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| V-DET output high level                  | VDET40 | V <sub>IN</sub> 40 | SG1    |           | 1V              | T43          | Input signal   | V <sub>CC</sub> -0.5 | V <sub>CC</sub> | V   | 0    |                         | 5  | 0  | 0   | 0   | 0   | 0   | 0   |
| V-DET output low level                   |        |                    |        |           |                 | T43          | No signal  | 0                    | 0.3             | 0.6 | V    | 0                       |    | 5  | 0   | 0   | 0   | 0   | 0   |
| DG                                       | DGLP38 | V <sub>IN</sub> 40 | SG5    | 3.58M     | 1V              | T38          |  | -2                   | 0               | 2   | %    | 0                       | 5  | 5  | 0   | 0   | 0   | 0   | 0   |
| DP                                       | DPLP38 | V <sub>IN</sub> 40 | SG5    | 3.58M     | 1V              | T38          |  | -1.5                 | 0               | 1.5 | deg  | 0                       | 5  | 5  | 0   | 0   | 0   | 0   | 0   |
| Crosstalk CVBS                           | CTCV   | V <sub>IN</sub> 40 | GND    | 5M        | 1V              | T38          |  | -60                  | -55             | dB  | 0    | 5                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   |
|  |        | V <sub>IN</sub> 42 | SG1    |           |                 |              |  |                      |                 |     |      |                         |    |    |     |     |     |     |     |
| Crosstalk C                              | CTC    | V <sub>IN</sub> 8  | GND    | 5M        | 714mV           | T31          |  | -60                  | -55             | dB  | 0    | 5                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   |
|  |        | V <sub>IN</sub> 10 | SG2    |           |                 |              |  |                      |                 |     |      |                         |    |    |     |     |     |     |     |
| Crosstalk Y                              | CTY    | V <sub>IN</sub> 18 | GND    | 5M        | 1V              | T29          |  | -60                  | -55             | dB  | 0    | 5                       | 0  | 0  | 0   | 0   | 0   | 0   | 0   |
|  |        | V <sub>IN</sub> 20 | SG3    |           |                 |              |  |                      |                 |     |      |                         |    |    |     |     |     |     |     |
| Video S/N                                | SN40   | V <sub>IN</sub> 40 | SG3    |           | 1V              | T38          | BW = HPF100kHz, LPF5MHz<br>20log (noise/signal)          | -65                  | -60             | dB  | 0    | 5                       | 5  | 0  | 0   | 0   | 0   | 0   | 0   |

# LA73031V

## Package Dimensions

unit : mm (typ)

3277



## Control Specification

Pin control voltage Low level: 0 to 0.7V, High level: 2.6 to 5V

### Input selection control

| PIN21  | PIN19  | PIN17  | PIN9    | PIN4      | PIN23    | Output  |       |         |               |
|--------|--------|--------|---------|-----------|----------|---------|-------|---------|---------------|
| INSEL3 | INSEL2 | INSEL1 | YOUTSEL | COMPONENT | Stand-by | CVBSOUT | Y OUT | C OUT   | C.SYNC        |
| L      | L      | L      | L       | L         | L        | CVBS1   | Y1    | C1      | Y1            |
| L      | L      | H      | L       | L         | L        | CVBS2   | Y2    | C2      | Y2            |
| L      | H      | L      | L       | L         | L        | CVBS3   | Y3    | C3      | Y3            |
| L      | H      | H      | L       | L         | L        | CVBS4   | Y4    | C4      | Y4            |
| H      | L      | L      | L       | L         | L        | CVBS5   | Y5    | C5      | Y5            |
| L      | L      | L      | H       | L         | L        | CVBS1   | CVBS1 | C1      | CVBS1         |
| L      | L      | H      | H       | L         | L        | CVBS2   | CVBS2 | C2      | CVBS2         |
| L      | H      | L      | H       | L         | L        | CVBS3   | CVBS3 | C3      | CVBS3         |
| L      | H      | H      | H       | L         | L        | CVBS4   | CVBS4 | C4      | CVBS4         |
| H      | L      | L      | H       | L         | L        | CVBS5   | CVBS5 | C5      | CVBS5         |
|        |        |        |         | H         | L        | Cb      | Y1    | Cr (C1) | Y1            |
|        |        |        |         |           | H        |         |       |         | CVBS2/Y2 (*1) |

### Other Controls

| Pin No | Control item | L control | H control |
|--------|--------------|-----------|-----------|
| 7      | Gain-CTL     | 0dB       | 6dB       |
| 28     | LPF ON/OFF   | ON        | OFF       |

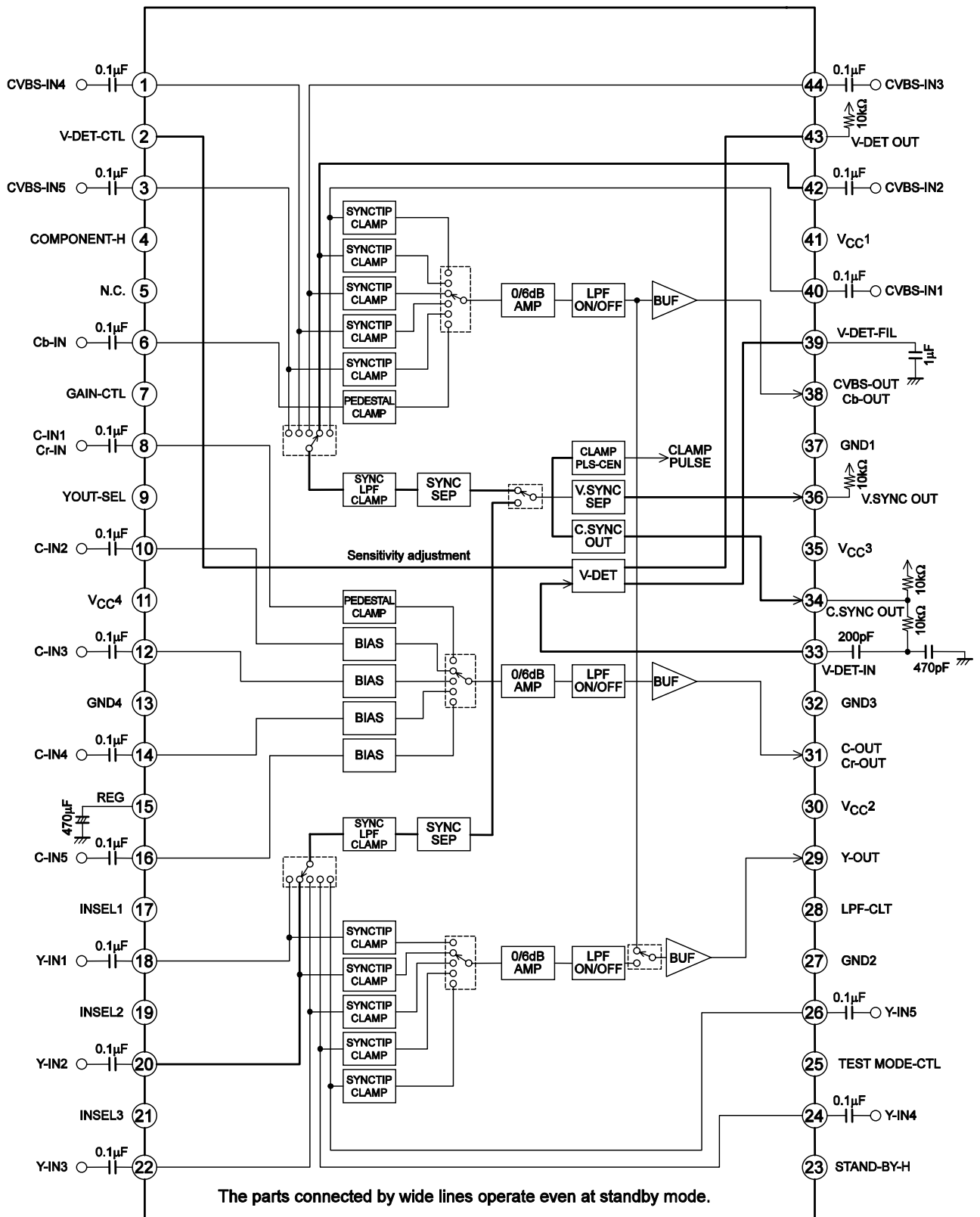
\*1: At the time of standby, if a signal is in Y2, the sync of the signal of Y2 will be separated.

### Standby mode

| CVBS2    | Y2       | C.Sync output |
|----------|----------|---------------|
| Input    | No Input | CVSB2         |
| Input    | Input    | Y2            |
| No Input | Input    | Y2            |

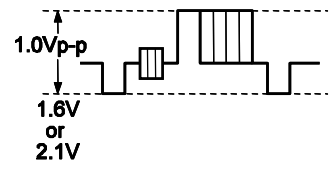
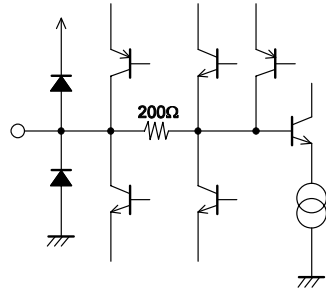
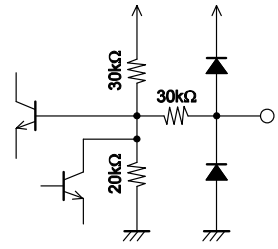
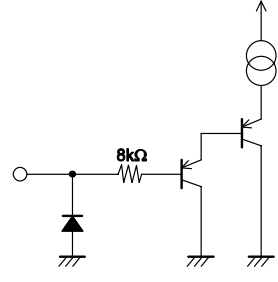
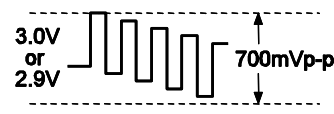
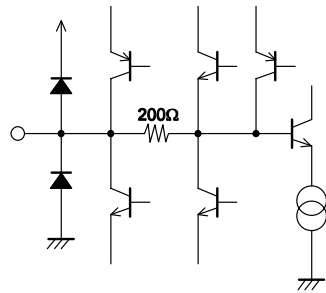
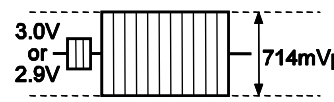
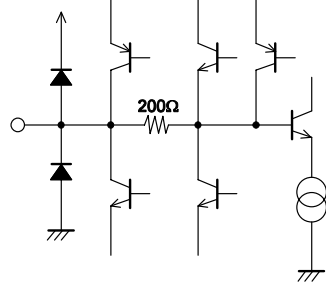
\*2: Since Pin25 is test mode control, please apply GND level.

Block Diagram and Application Circuit Example



# LA73031V

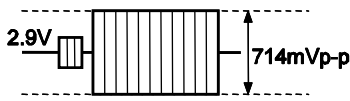
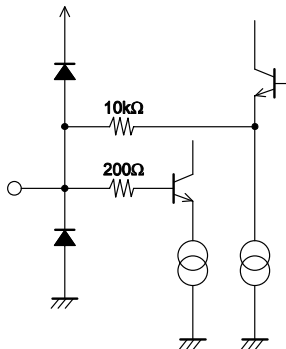
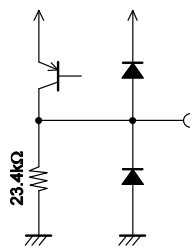
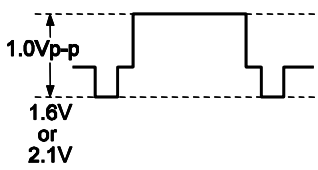
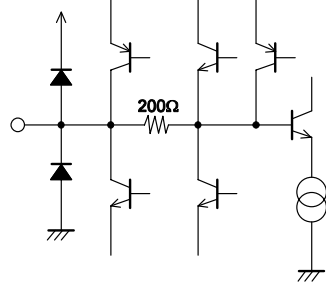
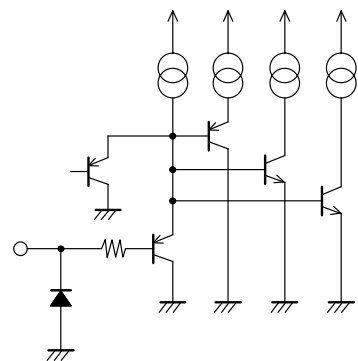
## Pin Functions

| Pin No.                  | Pin name   | Signal wave form   | DC voltage AC level                             | Equivalent circuit  |
|--------------------------|--|--|---|---|
| 1<br>3<br>40<br>42<br>44 | CVBS-IN4<br>CVBS-IN5<br>CVBS-IN1<br>CVBS-IN2<br>CVBS-IN3 |  <p>1.0Vp-p<br/>1.6V<br/>or<br/>2.1V</p>    | 0dB: 1.6V<br>6dB: 2.1V                          |    |
|                          |  | DC   | No signal: 1.6V                                 |   |
| 2                        | V-DET-CTL  | DC   | 1.7 to 2.0V                                     |    |
| 4                        | COMPONENT-H  | DC   | Except component mode: 0V<br>Component mode: 5V |   |
| 7                        | GAIN-CTL   | DC   | 0dB: 0V<br>6dB: 5V                              |   |
| 9                        | Y-OUT-SEL  | DC   | Y output: 0V<br>CVBS output :5V                 |   |
| 17<br>19<br>21           | INSEL1<br>INSEL2<br>INSEL3                               | DC   | Low: 0V<br>High: 5V                             |   |
| 23                       | STAND-BY-H   | DC   | Normal mode: 0V<br>Standby mode: 5V             |   |
| 28                       | LPF-CTL  | DC   | LPF-ON: 0V<br>LPF-OFF: 5V                       |   |
| 6                        | Cb-IN  |  <p>3.0V<br/>or<br/>2.9V<br/>700mVp-p</p> | 0dB: 3.0V<br>6dB: 2.9V                          |  |
|                          |  | DC   | No signal: 1.6V                                 |   |
| 8                        | C-IN1/<br>Cr-IN  |  <p>3.0V<br/>or<br/>2.9V<br/>714mVp-p</p> | 0dB: 3.0V<br>6dB: 2.9V                          |  |
|                          |  | DC   | No signal: 1.6V                                 |   |

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# LA73031V

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| Pin No.                    | Pin name   | Signal wave form  | DC voltage AC level    | Equivalent circuit  |
|----------------------------|--|---|------------------------|---|
| 10<br>12<br>14<br>16       | C-IN2<br>C-IN3<br>C-IN4<br>C-IN5   |  <p style="text-align: center;">2.9V<br/>714mVp-p</p>                  | 2.9V                   |    |
|                            |  | DC  | No signal: 2.9V        |   |
| 11<br>30<br>35<br>41       | V <sub>CC</sub> 4<br>V <sub>CC</sub> 2<br>V <sub>CC</sub> 3<br>V <sub>CC</sub> 1 |   |                        |   |
| 13<br>27<br>32<br>37       | GND4<br>GND2<br>GND3<br>GND1   |   |                        |   |
| 15                         | REG  | DC  | 2.5V                   |   |
| 18<br>20<br>22<br>24<br>26 | Y-IN1<br>Y-IN2<br>Y-IN3<br>Y-IN4<br>Y-IN5  |  <p style="text-align: center;">1.0Vp-p<br/>1.6V<br/>or<br/>2.1V</p> | 0dB: 1.6V<br>6dB: 2.1V |  |
|                            |  | DC  | No signal: 1.6V        |   |
| 25                         | TEST MODE-CTL  |   | GND                    |  |

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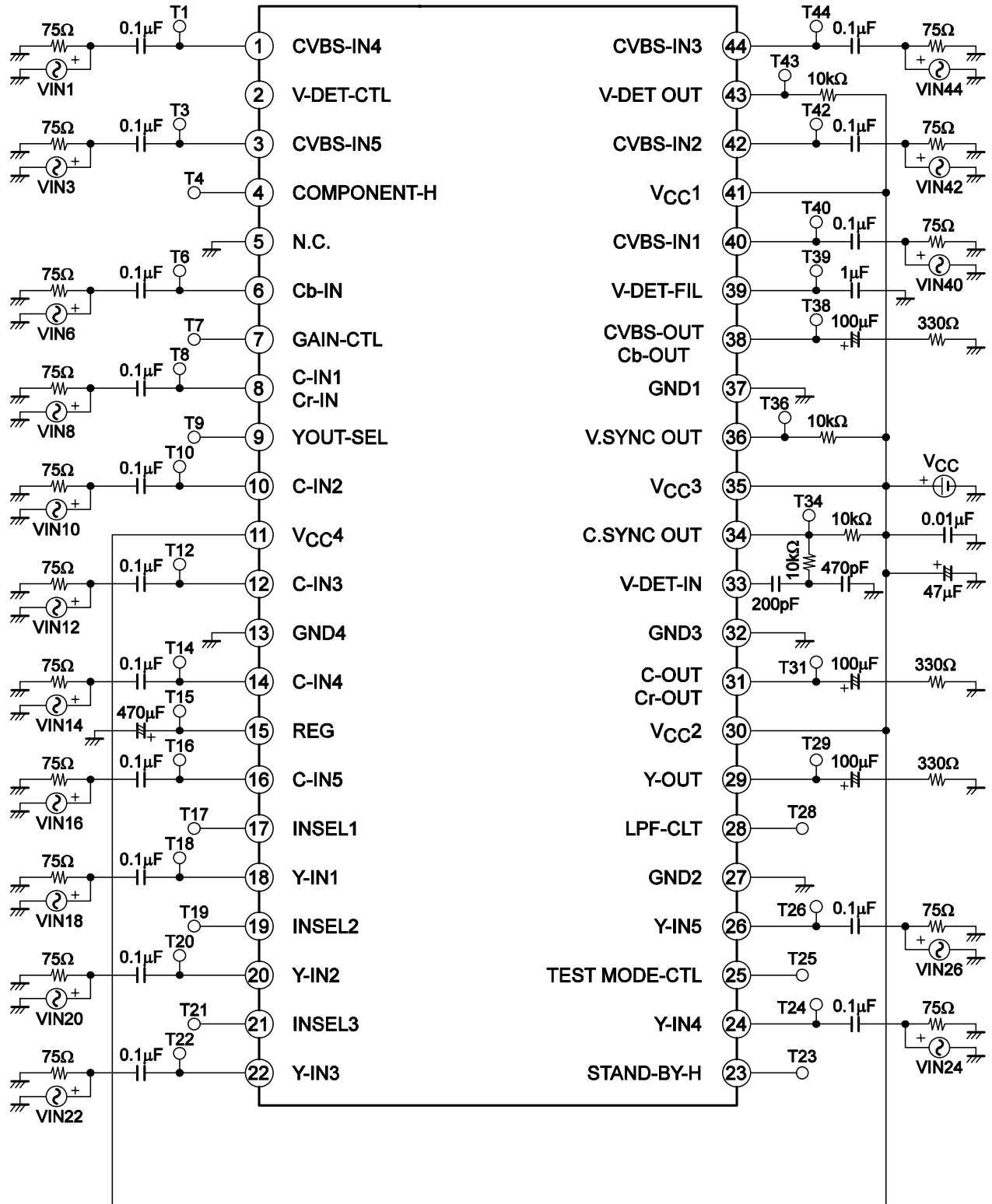
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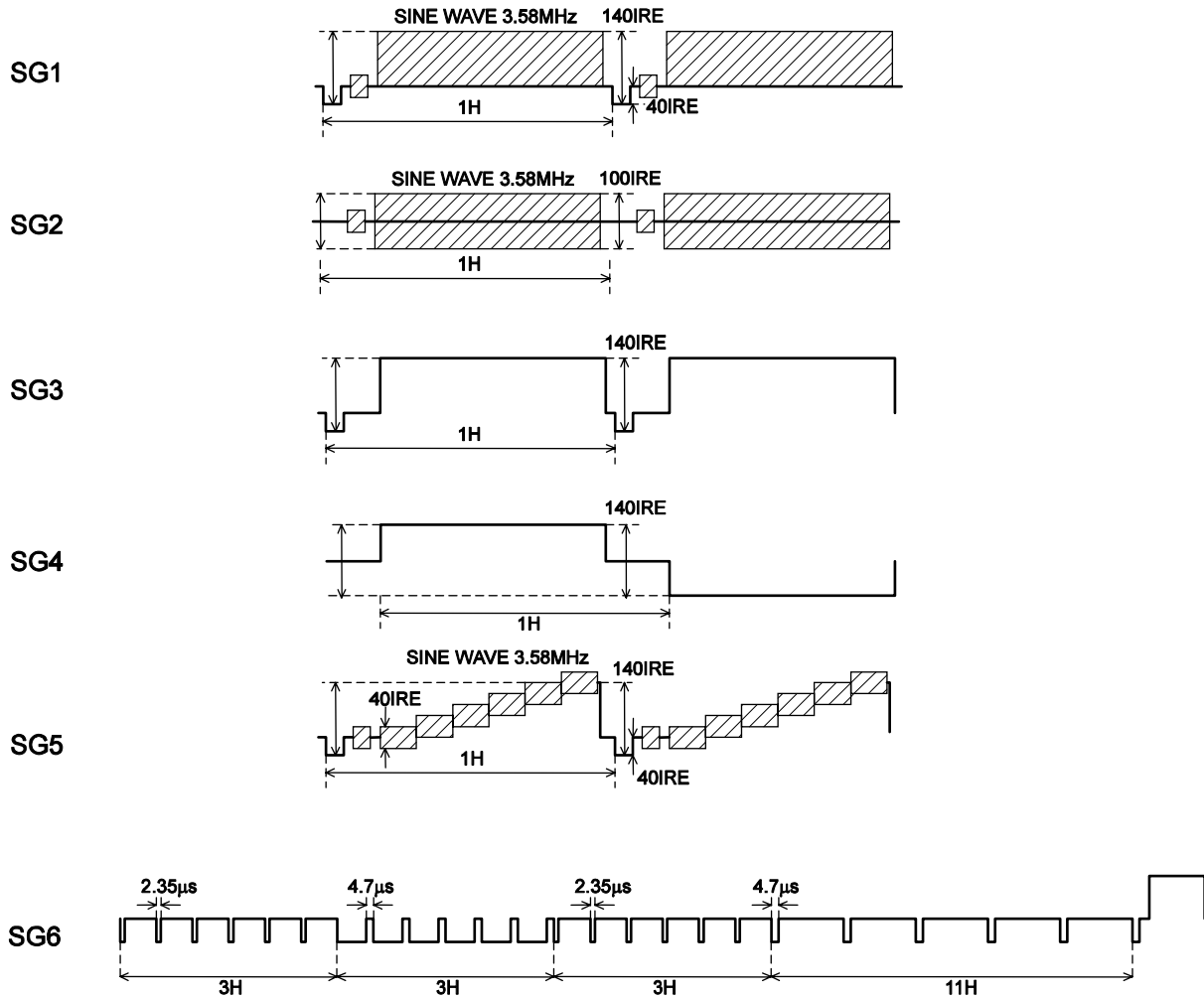
| Pin No.  | Pin name                 | Signal wave form | DC voltage AC level                         | Equivalent circuit |
|----------|--------------------------|------------------|---|--------------------|
| 29       | Y-OUT                    |                  | 0.8V  |                    |
| 31       | C-OUT/<br>Cr-OUT         |                  | 2.3V  |                    |
| 38       | CVBS-OUT/<br>Cb-OUT      |                  | CVBS output: 0.8V<br>Component output: 2.3V |                    |
| 33       | V-DET-IN                 |                  |   |                    |
| 34<br>36 | C.SYNC OUT<br>V.SYNC OUT |                  |   |                    |
| 43       | V-DET OUT                | DC               | No signal: 0.3V<br>Input signal: 5V         |                    |
| 39       | V-DET-FIL                | DC               |   |                    |



Test Circuit



Input Signal



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