

## Video Switch for Canal+ BH7636S

### ● Description

The BH7636S includes two video switches, one for clamp input and the second for bias input.

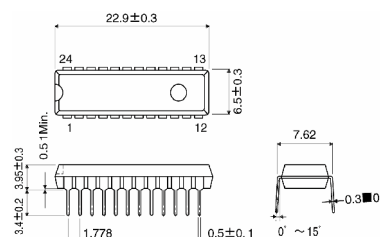
The I<sup>2</sup>C Bus for switch control simplifies applications, while the two expansion ports allow up to two external inputs.

### ● Features

- 1) I<sup>2</sup>C-BUS control
- 2) Video input is sync-tip clamped
- 3) Three FSCOUT
- 4) Two expansion ports
- 5) Mute function (bias)
- 6) 75 Ω driver output (pins 20 and 23) requires no attached capacitor.
- 7) Low value input capacitor : 0.022μF

I<sup>2</sup>C-BUS is a trade mark of PHILIPS Inc.

### ● Dimension (Units : mm)



SDIP24

### ● Applications

VCRs

### ● Absolute Maximum Ratings (Ta=25 °C)

Parameter	Symbol	Limits	Unit
Supply voltage	V <sub>CC</sub>	13.5	V
Power dissipation	P <sub>d</sub>	1200	mW
Operating temperature range	T <sub>opr</sub>	-25 ~ +60	°C
Storage temperature range	T <sub>stg</sub>	-55 ~ +125	°C

Derating : 12mW/°C for operation above Ta=25 °C.

### ● Recommended Operating Conditions (Ta=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating supply voltage	V <sub>CC</sub>	8.5	12	13	V

● Electrical Characteristics (Unless otherwise noted, Ta=25°C, Vcc= 12V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
<Whole device>						
Circuit current	I <sub>CC</sub>	30	46	62	mA	No signal
FSCOUT High voltage	V <sub>FSCH</sub>	11.0	11.8	12.0	V	R <sub>L</sub> =10k
FSCOUT Middle voltage	V <sub>FSCM</sub>	5.2	5.9	6.8	V	R <sub>L</sub> =10k
FSCOUT Low voltage	V <sub>F_SCL</sub>	0	0.2	1.0	V	R <sub>L</sub> =10k
FSCOUT limit current	I <sub>FSC</sub>	—	—	20	mA	V <sub>FSCO</sub> =10k
External control terminal sink current	I <sub>SYN</sub>	1.0	—	—	mA	R <sub>L</sub> =10k
External control terminal Low voltage	V <sub>AUXL</sub>	0	0.2	1.0	V	R <sub>L</sub> =10k
<Clamp input video switch>						
Voltage gain	G <sub>VV</sub>	-1	0	1	dB	V <sub>IN</sub> =1V <sub>P-P</sub> , f=4.43MHz
Frequency characteristic	V <sub>F</sub>	-3	0	1	dB	V <sub>IN</sub> =1V <sub>P-P</sub> , f=100k/7MHz
<Bias input video switch>						
Voltage gain	G <sub>VA</sub>	-1.5	0	1.5	dB	V <sub>IN</sub> =2V <sub>P-P</sub> , f=4.43MHz
Frequency characteristic	V <sub>F</sub>	-1.5	0	1.5	dB	V <sub>IN</sub> =2V <sub>P-P</sub> , f=100k/5MHz
Input impedance	Z <sub>IN</sub>	40	50	60	k	
<Control>						
High level voltage	V <sub>H</sub>	3.0	—	—	V	
Low level voltage	V <sub>L</sub>	0	—	1.5	V	

Note) I<sup>2</sup>C-BUS input specification

● Block Diagram

