

Video Switch for Canal+ **BH7636S**

● Description

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

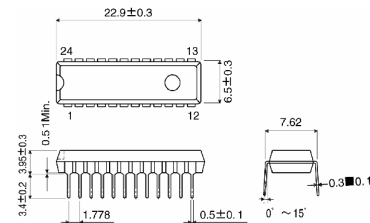
The I²C Bus for switch control simplifies applications, while the two expansion ports allow up to two external inputs.

● Features

- 1) I²C-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 : 0.022 μF

I²C-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 _{CC}	13.5	V
Power dissipation	P _d	1200	mW
Operating temperature range	T _{opr}	-25 ~ +60	°C
Storage temperature range	T _{stg}	-55 ~ +125	°C

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

● Recommended Operatingn Conditions (Ta=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating supply voltage	V _{CC}	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 _{CC}	30	46	62	mA	No signal
FSCOUT High voltage	V _{FSC H}	11.0	11.8	12.0	V	R _L =10k
FSCOUT Middle voltage	V _{FSC M}	5.2	5.9	6.8	V	R _L =10k
FSCOUT Low voltage	V _{FSC L}	0	0.2	1.0	V	R _L =10k
FSCOUT limit current	I _{FSC}	—	—	20	mA	V _{FSC O} =10k
External control terminal sink current	I _{SYN}	1.0	—	—	mA	R _L =10k
External control terminal Low voltage	V _{AUX L}	0	0.2	1.0	V	R _L =10k
<Clamp input video switch>						
Voltage gain	G _V	-1	0	1	dB	V _{IN} =1V _{P-P} , f=4.43MHz
Frequency characteristic	V _F	-3	0	1	dB	V _{IN} =1V _{P-P} , f=100k/7MHz
<Bias input video switch>						
Voltage gain	G _{V A}	-1.5	0	1.5	dB	V _{IN} =2V _{P-P} , f=4.43MHz
Frequency characteristic	V _F	-1.5	0	1.5	dB	V _{IN} =2V _{P-P} , f=100k/5MHz
Input impedance	Z _{IN}	40	50	60	k	
<Control>						
High level voltage	V _H	3.0	—	—	V	
Low level voltage	V _L	0	—	1.5	V	

Note) I²C-BUS input specification

● Block Diagram

