Video Switch for Canal+
BH7636S

●Description

The BH7636S includes two video switches, one for clamp input and the second for bias input.
The I^2C Bus for switch control simplifies applications, while the two expansion ports allow up to two external inputs.

●Features

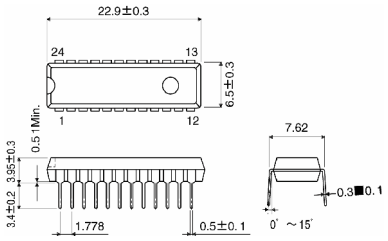
1) I^2C-BUS control
2) Video input is sync-tip clamped
3) Three FSCOUT
4) Two expansion ports
5) Mute function (bias)
6) 75 driver output (pins 20 and 23) requires no attached capacitor.
7) Low value input capacitor : 0.022µF

I^2C-BUS is a trade mark of PHILIPS Inc.

●Applications

VCRs

●Dimension (Units : mm)



SDIP24

●Absolute Maximum Ratings (Ta=25˚C)

Parameter	Symbol	Limits	Unit
Supply voltage	V_{CC}	13.5	V
Power dissipation	Pd	1200	mW
Operating temperature range	Topr	–25 ~ +60	˚C
Storage temperature range	Tstg	–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_{FSCH}	11.0	11.8	12.0	V	R_L=10k
FSCOUT Middle voltage	V_{FSCM}	5.2	5.9	6.8	V	R_L=10k
FSCOUT Low voltage	V_{FSCL}	0	0.2	1.0	V	R_L=10k
FSCOUT limit current	I_{FSC}	—	—	20	mA	V_{FSCO}=10k
External control terminal sink current	I_{SYN}	1.0	—	—	mA	R_L=10k
External control terminal Low voltage	V_{AUXL}	0	0.2	1.0	V	R_L=10k
<Clamp input video switch>						
Voltage gain	G_{VV}	–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_{VA}	–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) I^2C-BUS input specification

● Block Diagram