Video signal switcher BA7001

The BA7001 is switching IC for switching audio and video signals. The circuit is designed to keep switching noise and the DC output voltage to an absolute minimum. The input signal switching frequency range is from the audio band to several MHz.

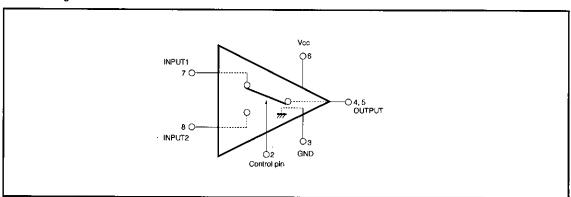
Applications

Video cassette recorders and audio equipment

Features

- 1)Low DC offset output voltage.
- 2)Low switching noise.
- 3)Wide input frequency range (suitable for both audio and video signal).
- 4)Excellent crosstalk characteristics (-50dB Typ. at 3.58MHz).
- 5) High control pin input impedance.

Block diagram



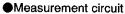
■Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit	
Power supply voltage	Vcc	15	V	
Power dissipation	Pd	540 *	mW	
Operating temperature	Торг	-10~60	°C	
Storage temperature	Tstg	-25~125	°C	
Input voltage 1	V _I N1	3	V	
Input voltage 2	V _{IN2}	3	V	

^{*} Reduced by 5.4mW for each increase in Ta of 1°C over 25°C.

●Electrical characteristics (Unless otherwise specified Ta=25°C and Vcc=12V)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Quiescent current	la	5	13	18	mA	_
Crosstalk	СТ	_	-50	-40	dB	fin=3.58MHz
Total-harmonic distortion	THD		0.01	0.3	%	V _{IN} =1kHz, 0dBm
Control threshold voltage	Vтн	0.8	2.0	3.0	V	_
Input impedance	Zın	10	15		kΩ	_



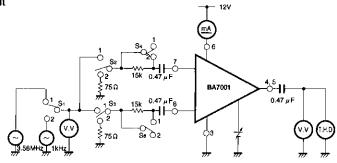
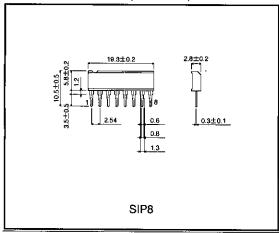


Fig.1

Parameter	S ₁	S ₂	Sa	S4	S ₅	Remarks
loc	1	2	2	2	1	_
CT	1	1 - 2	1-2	2	1	_
THD	2	1	1	2	1	_
Vтн	2	2	1	2	1	Pin 2 voltage measurement
ZIN	2	1	1	1-2	1-2	_

●External dimensions (Units: mm)



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