

Structure : Silicon Monolithic Integrated Circuit

Product name : Basic 3 Outputs Video Drivers

Type : **BA7622F** 

Features : The ICs include three  $75\,\Omega$  driver circuits, two of which have sync-tip clamp inputs.

The other driver has a biased input terminated with a  $20k\Omega$  resister. Each output

can drive two loads.  $(75 \Omega x^2)$ 

## OAbsolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply voltage	V <sub>Max</sub>	8.0	V
Power dissipation	Pd	550 *	mW
Operating temperature	Topr	-25~+75	°C
Storage temperature	Tstg	-55 <b>~</b> +125	°C

<sup>\*</sup> Deratings is done at 5.5mW/°C above Ta=25°C

## OOperating Range (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit
Power supply voltage	Vcc	4.5	5.0	5.5	V

<sup>\*</sup> This product is not designed for protection against radioactive rays.

#### Application example

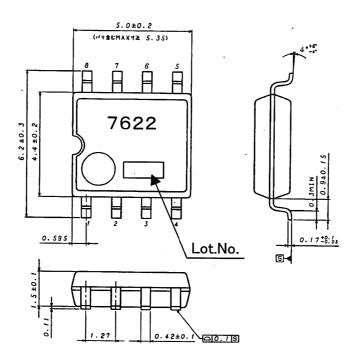
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# OElectrical characteristics (Unless otherwise noted, Ta= 25°C, Vcc=5.0V, and load is two system drive)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Circuit Current	Icc	-	23.6	35.4	mA	No signal
Maximum output level	$V_{om}$	2.8	3.3	-	<b>V</b> p-p	f=1kHz,THD=1.0%
Voltage gain	Gv	-1.2	-0.6	0	dB	f=1kHz,V <sub>IN</sub> =2.0Vp-p
Frequency characteristic	Cf	-3	0	1.3	dB	10kHz/1MHz, V <sub>IN</sub> =1.0Vp-p
Differential gain 75 Ω drive1	DG1		0.4	1.0	%	V <sub>IN</sub> =2.0Vp-p, Standard staircase signal
Differential phase $75 \Omega$ drive 1	DP1	-	0.4	1.0	deg	V <sub>IN</sub> =2.0Vp-p, Standard staircase signal
Differential gain 75Ωdrive2	DG2	-	0.7	2.0	%	V <sub>IN</sub> =2.0Vp-p, Standard staircase signal
Differential phase $75\Omega$ drive2	DP2	-	0.7	2.0	deg	V <sub>IN</sub> =2.0Vp-p, Standard staircase signal
Interchannel crosstalk	C <sub>T</sub>	-	-60	-	dB	f=4.43MHz, V <sub>IN</sub> =2.0Vp-p
Input impedance(V <sub>IN</sub> 3)	Z <sub>IN</sub> 3	17	20	23	kΩ	-
Total harmonic distortion(V <sub>IN</sub> 3)	THD3	-	0.1	0.5	%	f=1kHz,V <sub>IN</sub> =1.0Vp-p

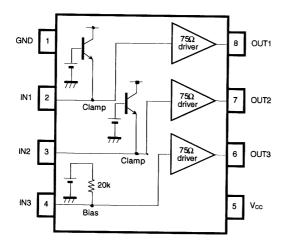
## OOuter dimensions



SOP8 (Unit:mm)



#### **OBlock diagram**



### OPin number and pin name

Pin No.	Pin name
1	GND
2	IN1
3	IN2
4	IN3
5	VCC
6	OUT3
7	OUT2
8	OUT1

#### OCautions on use

# 1) Absolute maximum ratings

If applied voltage, operating temperature range, or other absolute maximum ratings are exceeded, the LSI may be damaged. Do not apply voltages or temperatures that exceed the absolute maximum ratings. If you think of a case in which absolute maximum ratings are exceeded, enforce fuses or other physical safety measures and investigate how not to apply the conditions under which absolute maximum ratings are exceeded to the LSI.

#### 2) GND potential

Make the GND pin voltage such that it is the lowest voltage even when operating below it. Actually confirm that the voltage of each pin does not become a lower voltage than the GND pin, including transient phenomena.

## 3) Thermal design

Perform thermal design in which there are adequate margins by taking into account the allowable power dissipation in actual states of use.

# 4) Shorts between pins and miss-installation

When mounting the LSI on a board, pay adequate attention to orientation and placement discrepancies of the LSI. If it is miss-installed and the power is turned on, the LSI may be damaged. It also may be damaged if it is shorted by a foreign substance coming between pins of the LSI or between a pin and a power supply or a pin and a GND.

### 5) Operation in strong magnetic fields

Adequately evaluate use in a strong magnetic field, since there is a possibility of malfunction.

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