

STRUCTURE Silicon Monolithic Integrated Circuit

PRODUCTS 3ch  $75 \Omega$  driver

TYPE BA7660FS

PACKAGE Figure - 1 SSOP — A 1 6 P I N (Plastic Mold)

BLOCK DIAGRAM Figure - 2

#### **Features**

1) A low consumption electric power movement

- 2) Output Mute circuit built-in
- 3) The power save circuit built-in
- 4) Output protection circuit built-in
- 5) Output coupling capacitor is the small capacity by sag compensation circuit built-in
- 6) The driver can have two load (each channel)
- 7) Input is directly connected with D/A converter output

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

Item	Symbol	Rating	Unit
Power supply Voltage	Vcc	8	٧
Power Dissipation	Pd	500	mW
Operating Temperature Range	Topr	-25~+75	°C
Storage Temperature Range	Tstg	-55~+125	°C

<sup>¾1 When absolute temperature exceeds Ta=25°C, the rated value is reduced by 5.0mW/°C.</sup> 

### Application example

The application circuit is recommended for use. Make sure to confirm the adequacy of the characteristics. When using the circuit with changes to the external circuit constants, make sure to leave an adequate margin for external components including static and transitional characteristics as well as dispersion of the IC. Note that ROHM cannot provide adequate confirmation of patents.

The product described in this specification is designed to be used with ordinary electronic equipment or devices (such as audio-visual equipment, office-automation equipment, communications devices, electrical appliances, and electronic toys). Should you intend to use this product with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

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■ Electrical characteristics 【Unless otherwise specified, Ta=25°C, VCC=5V】

Item	Symbol	Limit			Lloit	Condition
		Min.	Тур.	Max.	Unit	Condition
Circuit current	ICC	11.4	22.8	34.2	mA	No signal
Maximum output level	Vom	2.6	3.0	ı	Vp-p	f=1kHz,THD=1%
Voltage gain	GV	5.5	6.0	6.5	dB	f=4.43MHz, 1Vp-p
Frequency characteristics	Gf	-1.0	0.0	1.0	dB	f=7MHz/1MHz,1Vp-p
Mute attenuation	MT	_	-60	_	dB	f=4.43MHz, 1Vp-p
Mute change level "H"	VTHH	3.5	_	VCC	V	
Mute change level "L"	VTHL	0	_	1.0	V	

## **■**PACKAGE

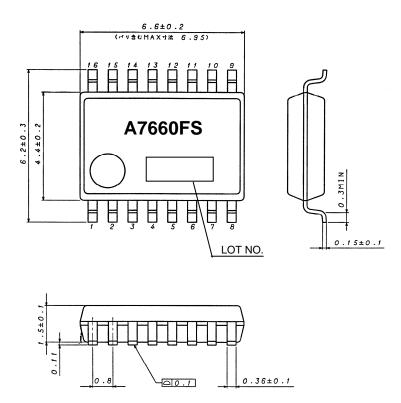


Figure 1 SOP16PIN (Plastic Mold)



## ■BLOCK DIAGRAM

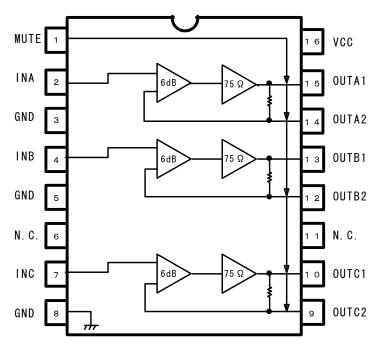


Figure 2

## ■PIN Assignment

PIN No.	PIN NAME	
1	MUTE	
2	INA	
3	GND	
4	INB	
5	GND	
6	N.C.	
7	INC	
8	GND	
9	OUTC2	
10	OUTC1	
11	N.C.	
12	OUTB2	
13	OUTB1	
14	OUTA2	
15	OUTA1	
16	VCC	



#### ■ Cautions on use

- (1) Numbers and data in entries are representative design values and are not guaranteed values of the items.
- (2) Although we are confident in recommending the sample application circuits, carefully check their characteristics further when using them. When modifying externally attached component constants before use, determine them so that they have sufficient margins by taking into account variations in externally attached components and the Rohm LSI, not only for static characteristics but also including transient characteristics.
- (3) 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 exceeded 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.

- (4) 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.
- (5) Thermal design
  - Perform thermal design in which there are adequate margins by taking into account the allowable power dissipation in actual states of use.
- (6) Shorts between pins and misinstallation
  - When mounting the LSI on a board, pay adequate attention to orientation and placement discrepancies of the LSI. If it is misinstalled 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.
- (7) Operation in strong magnetic fields

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

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