

| | |
|---------------|---|
| STRUCTURE | Silicon Monolithic Integrated Circuit |
| PRODUCTS | 3 channel 75 Ω driver |
| TYPE | BA7666FS |
| PACKAGE | Figure - 1 S S O P — 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) Sync-tip-clamp input

Absolute Maximum Rating (Ta=25°C)

| Item | Symbol | Rating | Unit |
|-----------------------------|--------|-----------------|------|
| Power Supply Voltage 1 | Vcc | 8 | V |
| Power Dissipation | Pd | 6 5 0 | mW |
| Operating Temperature Range | Topr | - 2 5 ~ + 7 5 | °C |
| Storage Temperature Range | Tstg | - 5 5 ~ + 1 2 5 | °C |

※ When absolute temperature exceeds Ta=25°C, the rated value is reduced by 6.5mW/°C.

Operating Range (Ta=25°C)

| Item | Symbol | Min. | TYP. | Max. | Unit |
|--------------------------------|--------|-------|-------|-------|------|
| Operating Supply Voltage Range | Vcc | 4 . 5 | 5 . 0 | 5 . 5 | V |

※ This product design is not intended for use involving radioactive rays.

Application example

The application circuit is recommended for use. Make sure to confirm the adequacy of the characteristics.

When using the circuit with change 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.

ROHM assumes no responsibility for use of any circuits described herein, conveys no license under any patent or other right, and makes no representations that the circuits are free from patent infringement/

| Item | Symbol | Limit | | | Unit | Condition |
|--------------------------|--------|-------|------|------|------|---------------------|
| | | MIN. | TYP. | MAX. | | |
| Circuit current | ICC | 11.7 | 23.4 | 35.1 | mA | No signal |
| Maximum output level | Vom | 2.6 | 3.0 | — | Vp-p | f=1kHz, THD=1% |
| Voltage Gain | GV | 5.5 | 6.0 | 6.5 | dB | f=4.43MHz, 1Vp-p |
| Frequency characteristic | Gf | -1.0 | 0.0 | 1.0 | dB | f=10MHz/1MHz, 1Vp-p |
| Channel crosstalk | CT | — | -60 | — | dB | f=4.43MHz, 1Vp-p |
| MUTE Attenuation | MT | — | -60 | — | dB | f=4.43MHz, 1Vp-p |
| MUTE Change level "H" | VTHH | 2.5 | — | VCC | V | |
| MUTE Change level "L" | VTHL | 0 | — | 1.0 | V | |
| MUTE Circuit current | IMT | — | 2.0 | 4.0 | mA | |

■PACKAGE

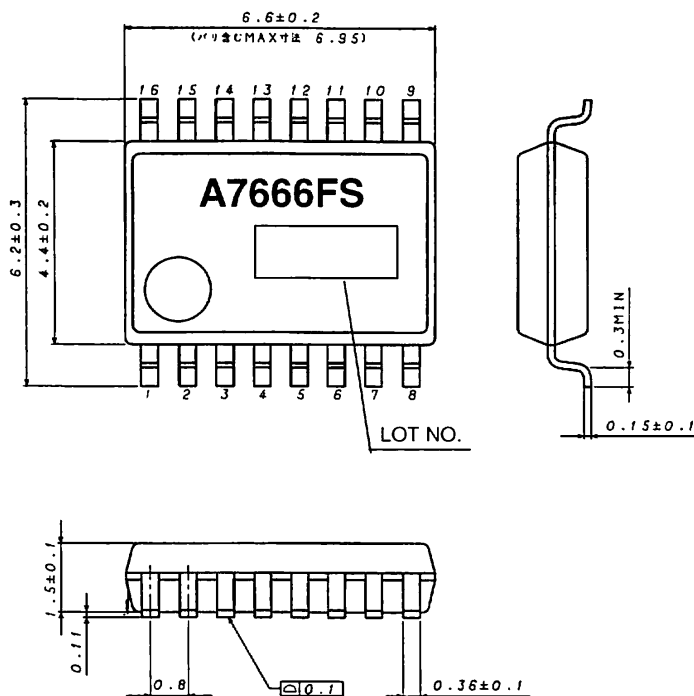


Figure 1 SSOPA16PIN (Plastic Mold)

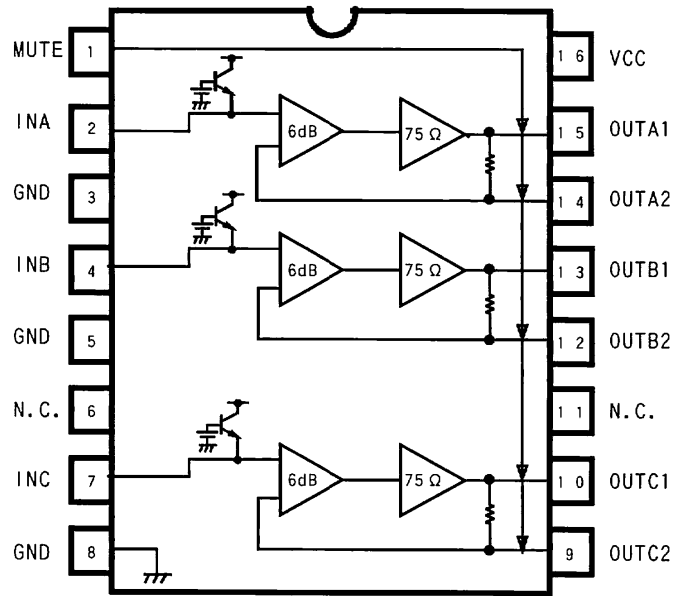


Figure 2

■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 | VCC1 |

■Cautions on use

- (1) Numbers and data in entries are representative design values and are not guaranteed value 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 exceed the absolute maximum ratings. If you think of 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 field, since there is a possibility of malfunction.

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