

DATA SHEET

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| Part No. | AN17813A |
| Package Code No. | HSIP012-P-0000E |

SEMICONDUCTOR COMPANY
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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AN17813A

Audio power amplifier IC

■ Features

- Dual 7.5 W + single 14 W audio power amplifier
- Built-in muting circuit
- Incorporating protection circuit

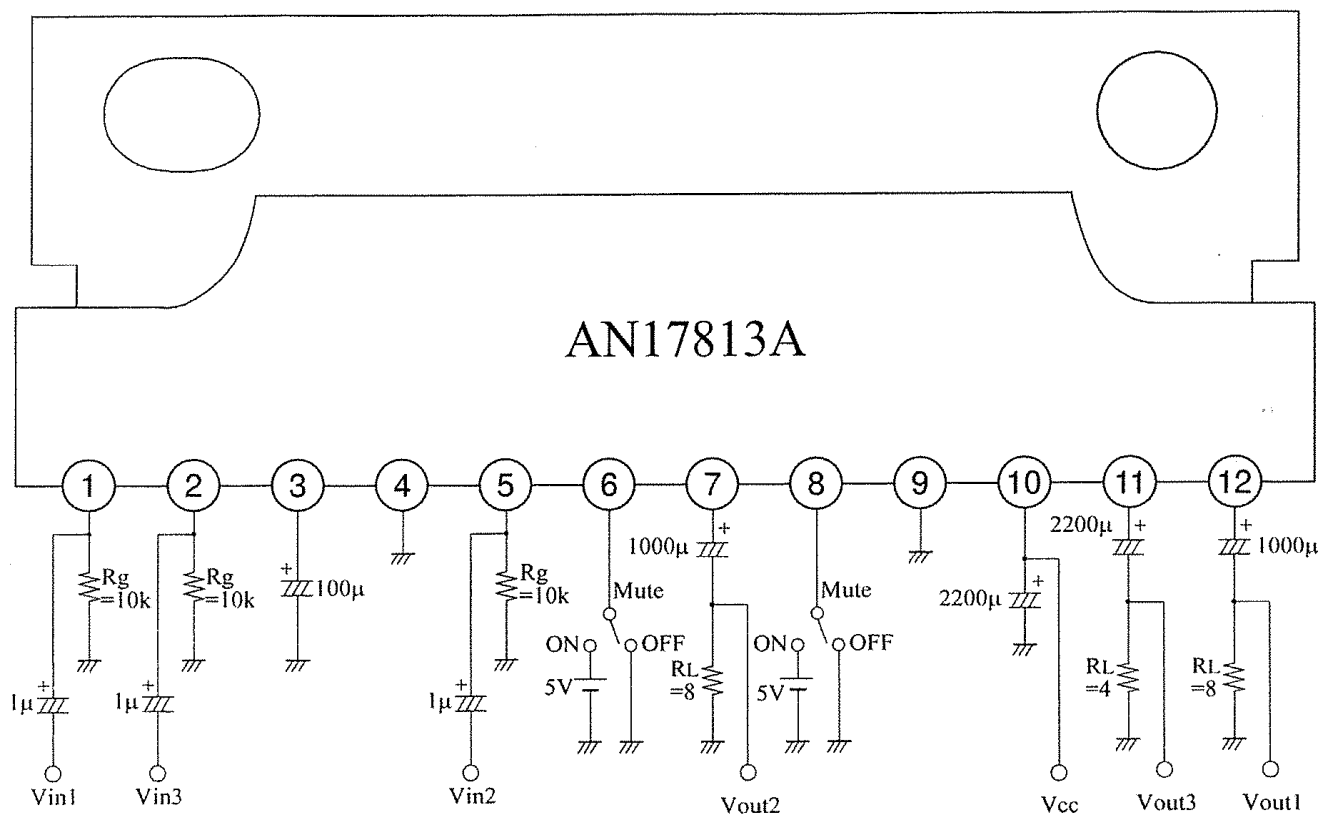
■ Application

- Low frequency amplifier

■ Package

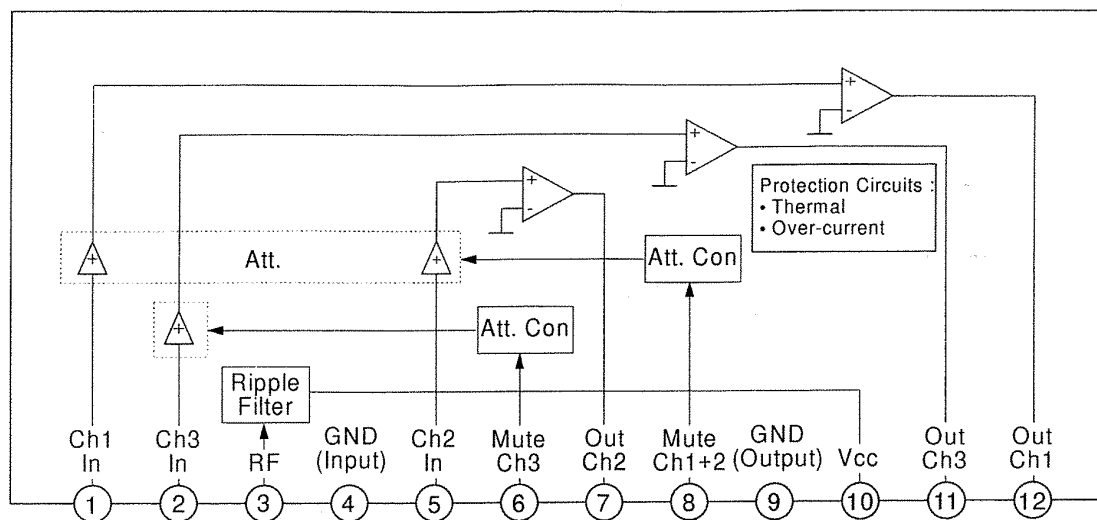
- SIL-12 pin plastic package (Power-type with fin)

■ Application Circuit Example



Note) Mute 'off', connect to 0 V

■ Block Diagram



■ Pin Descriptions

| Pin No. | Description | Pin No. | Description |
|---------|-----------------|---------|--------------------|
| 1 | Channel 1 input | 7 | Channel 2 output |
| 2 | Channel 3 input | 8 | Channel 1 & 2 mute |
| 3 | Ripple filter | 9 | Output GND |
| 4 | Input GND | 10 | V _{CC} |
| 5 | Channel 2 input | 11 | Channel 3 output |
| 6 | Channel 3 mute | 12 | Channel 1 output |

■ Absolute Maximum Ratings

| No. | Parameter | Symbol | Rating | Unit | Note |
|-----|--|-----------|--|------------------|------|
| 1 | Supply voltage | V_{CC} | 30 | V | — |
| 2 | Supply current | I_{CC} | 8.0 | A | — |
| 3 | Power dissipation | P_D | 37.5 | W | *1 |
| 4 | Storage temperature | T_{stg} | -55 to +150 | °C | *2 |
| 5 | Operating ambient temperature | T_{opr} | -25 to +75 | °C | *2 |
| 6 | Operating ambient atmospheric pressure | P_{opr} | $1.013 \times 10^5 \pm 0.61 \times 10^5$ | Pa | — |
| 7 | Operating constant gravity | G_{opr} | 9 810 | m/s ² | — |
| 8 | Operating shock | S_{opr} | 4 900 | m/s ² | — |

Note) *1: $T_a = 75^\circ\text{C}$. For the independent IC without a heat sink.

*2: Except for the storage temperature and operating ambient temperature, all ratings are for $T_a = 25^\circ\text{C}$.

■ Operating Supply Voltage Range

| Parameter | Symbol | Range | Unit | Note |
|--------------------------------|----------|--------------|------|------|
| Operating Supply Voltage Range | V_{CC} | 10.0 to 26.0 | V | — |

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