

DATA SHEET

Part No.	AN17020A
Package Code No.	*QFN016 - P - 0304

SEMICONDUCTOR COMPANY
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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AN17020A

Silicon Monolithic Bipolar IC

■ Features

- Headphone amplifier IC HP / Line Control Function, Mute Function

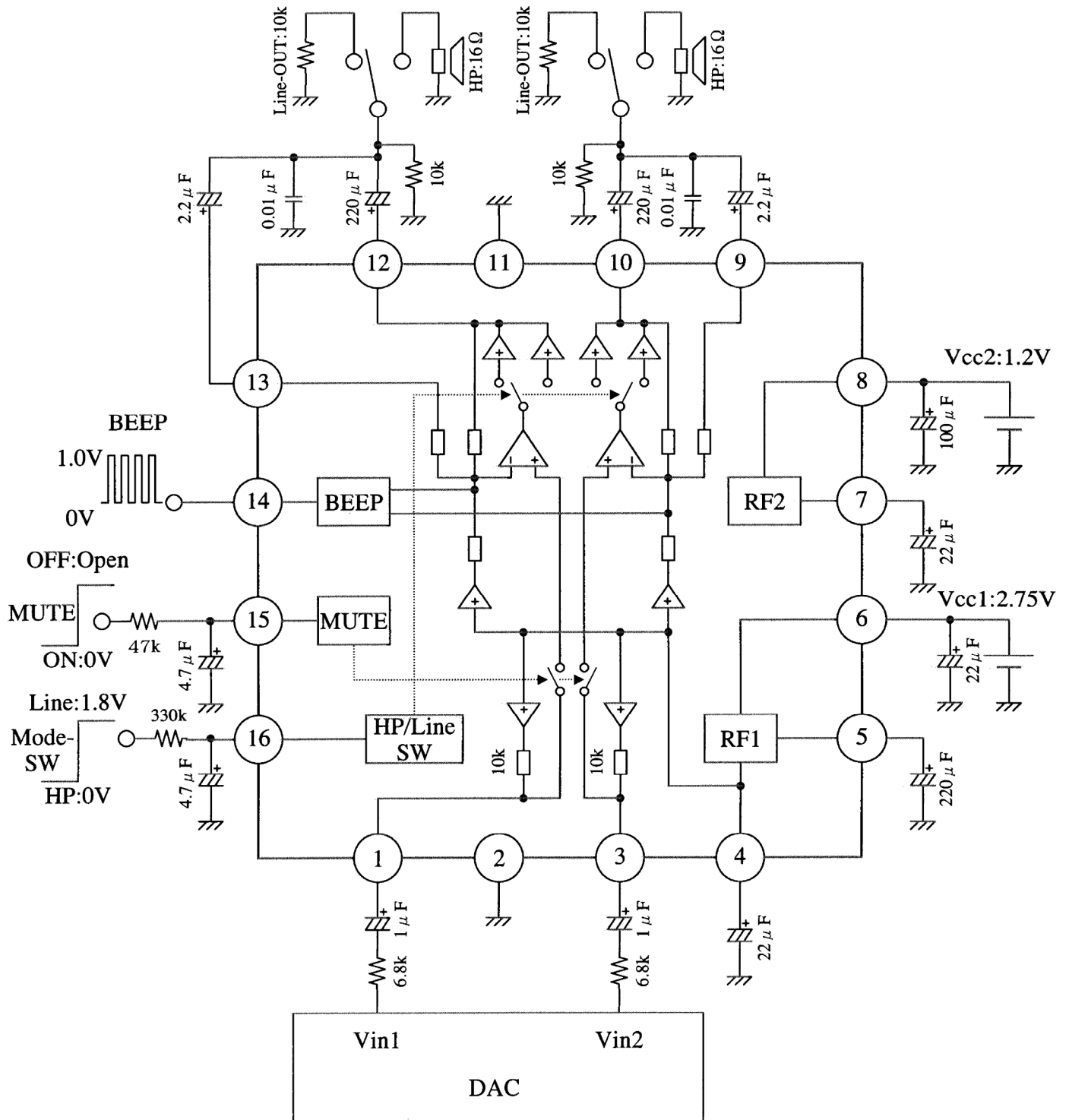
■ Application

- Low Frequency Amplifier

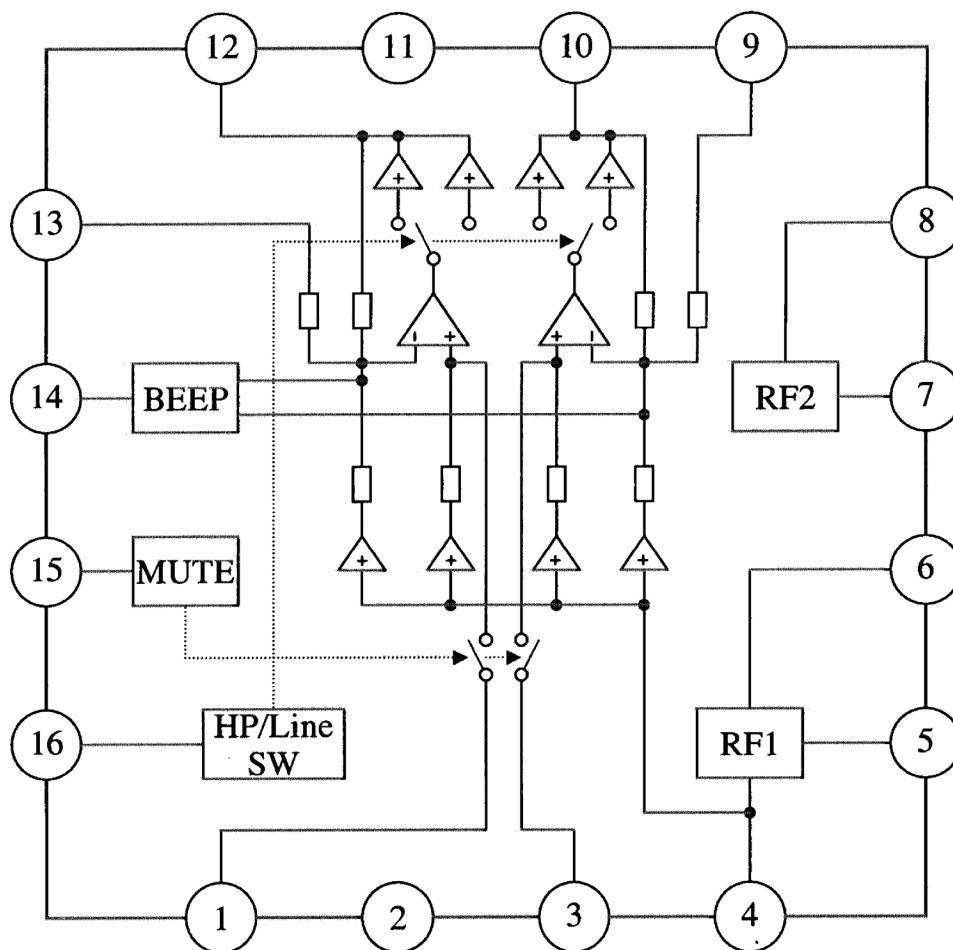
■ Package

- Quadrangle - 16Pin Plastic Package (QFN type)

■ Application Circuit



■ Block Diagram



■ Pin Descriptions

Pin No.	Function	Pin No.	Function
1	Ch.1 input	9	Ch.2 sense output
2	GND (Input)	10	Ch.2 power output
3	Ch.2 input	11	GND (Output)
4	Half V_{CC1} reference voltage	12	Ch.1 power output
5	Ripple filter	13	Ch.1 sense output
6	V_{CC1}	14	BEEP output
7	Half V_{CC2} reference voltage	15	Muting output
8	V_{CC2}	16	HP / Line control

■ Absolute Maximum Ratings

No.	Parameter	Symbol	Rating	Unit	Note
1	Storage temperature	T_{stg}	-55 to +150	°C	*1
2	Operating ambient temp	T_{opr}	-25 to +75	°C	
3	Operating ambient atmospheric pressure	P_{opr}	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	
4	Operating constant gravity	G_{opr}	9 810	m/s ²	
5	Operating shock	S_{opr}	4 900	m/s ²	
6	Supply voltage 1	V_{CC1}	4.6	V	
7	Supply current 1	I_{CC1}	100	mA	
8	Supply voltage 2	V_{CC2}	4.6	V	
9	Supply current 2	I_{CC2}	200	mA	
10	Power dissipation	P_{D}	292	mW	*2

Note) *1 : $T_a = 25^\circ\text{C}$ except storage temperature and operating ambient temperature.

*2 : At $T_a = 75^\circ\text{C}$ on PCB of the standard, 50 mm × 50 mm × 0.8 tmm glass-epoxy.

■ Operating Supply Voltage Range

Operating Supply Voltage Range	V_{CC1}	2.0 to 4.5
	V_{CC2}	0.9 to 4.5

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